DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

VOL. VI. BOSTON, MAY, 1854. NO. 5.

RAYNOLDS & NOURSE, PROPRIETORS.
OFFICE....QUINCY HALL.

SIMON BROWN, EDITOR.

FRED'K HOLBROOK, } ASSOCIATE
HENRY F. FRENCH, } EDITORS.

CALENDAR FOR MAY.

"Then sing, ye birds, sing, sing a joyous song!
And let the young lambs bound
As to the tabor's sound!
We *in thought* will join your throng,
Ye that pipe and ye that play,
Ye that through your hearts to-day
Feel the gladness of the MAY."

AGAIN, May has come, bringing with it a new existence to all—a new phase of animated Nature. All vegetable life springs into a new vigor, having now succeeded in shaking off the cold embraces of winter. The animals look, and act, glad—the calves bleat, the cows low, the lambs bound in sportive gambols over the hillocks by the side of their affectionate dams—the cocks sing incessantly and the hens cackle garrulously, big with importance, as they are preparing for their anticipated broods! The hamlet is vocal with pleasant sounds, and the eye is gladdened with pleasant sights.

But MAY does not impart new animation to the lower orders alone. The desponding find new hope—the melancholy are more cheerful, and the sick grow strong in the soft breezes, wafted from a world of new flowers at the south. Even the little children have an instinct for the spring, and feel it to the very tips of their fingers.

"All the earth is gay;
Land and sea
Give themselves up to jollity."

MAY, too, is marked as the Month of Loves—lovers stray in the old woods, linger mid the solemn, deep-breathing pines, stoop by the murmuring brook and pluck the gay cowslip, or dream of happiness that never dies as they stand in the grand cathedral of the primeval oaks. The loves and lays of the poets are incited by the return of spring; and when we can spare a moment from money-getting, or fame-getting, perhaps we shall establish some of the ceremonies which have so long prevailed in England in the merry month of MAY.

"It would be a pleasant sight, to see
A little village company
Drawn out on the first of May
To have their annual holiday:—
The pole hung round with garlands gay;
The young ones footing it away;
The aged cheering their old souls
With recollections and their bowls;
Or, on the mirth and dancing falling,
Their oft-times-told old tales retaleing."

Not only the country people there, but the trades-people, mechanics, and chimney-sweepers, have their "good-times," in May. The milk-maids dress fantastically, and decorate themselves and their lovers with evergreens and flowers, and dance on the village green. The May-Pole is erected, and festooned with ribbons and flowers, and with pipe, and fiddle and drum, they express their joy at the return of MAY.

"The hedges and trees, they are so green,
As green as any leek—
Our Heavenly Father, He watered them
With His heavenly dew so sweet."

But SEED-TIME has come, too, and we must hasten away from the *May-Pole*, and see if the waiting soil does not demand our attention now.

PLOWING AND MANURING.—Soils are so differently constituted and located, and present so many peculiarities of their own, that only a few rules are of general application. That a gradual deepening of the soil is highly beneficial to crops is a well settled principle. But even this must be varied according to the manner in which the manure is to be applied,—so that it seems necessary that each shall experiment for himself on his own land. Some most exemplary farmers spread green dressing upon the sward, and turn it under from six to ten inches, and say that they obtain fine crops of corn from the process, while others declare that they have tried it with an utter want of

success. Now it would seem that each one might settle this question for himself, by treating the same field, with the same kind and amount of manure, first by plowing under, and second by first plowing, and then spreading the manure and working it down two to five inches by the plow, cultivator, horse-hoe or harrow. An experiment of this kind instituted upon each part of the farm where the soils vary, would produce such results as to satisfy most persons what particular process they ought to pursue with regard to the depth to which manure should be placed from the surface.

STEEPING SEED CORN.—The blackbirds, crows and cut-worms have ruined the prospects of many a fair field of corn, and obliged its owner to devote it to some other crop, after the beautiful blades had come up and made a fine start. To prevent this, the attention of the reader is called to several articles on the subject, recently given in these columns. Steeping the corn in salt-petre or copperas water, will give it such a taste as to make it disagreeable to the birds, and it is said also to the cut-worm. Soaking the corn in water and then rolling it in tar and plaster will also act as a preventive.

GREEN CORN FOR SUMMER FODDER.—Sow southern corn as early as the ground will permit, a few rows at a time, and continue at intervals of one or two weeks, and you may help out the parched pastures and keep up a liberal supply of milk. The soil should be deeply plowed, and generously enriched.

GRAFTING.—Treat the old trees gently—keep off the hob-nail boots, axes and hatchets. Graft the topmost branches this year, and leave the others to assist nature in carrying out the operations she has begun. Dig about the trees—feed them with a dressing of good compost, a little ashes, a few handsfull of bone dust, scrape slightly and scrub their old trunks with soap and water, and then stand by and see how they will yield you in five or six years—sometimes they will in three or four—the delicious Baldwin, Hubbardston or Northern Spy. If some of your young trees have been injured, have contracted a stunted habit or are in any way deformed, overhaul them thoroughly about the roots, then cut off close to the ground, and insert a Hunt Russet, Sweet Bough, or Morrison's Red if you can get it.

Take up one hundred of your little nursery trees—if they are half an inch in diameter they will answer—cut off the tap, and most of the other roots, keep them in moist earth and graft at your leisure; then set them in nursery rows and cultivate well, and you will soon be supplied with the best of trees for continuing out your orchard.

THE CORN CROP.—See article on "Profits of raising corn," in another column, and in the weekly *Farmer* of April 22, by B. F. CUTTER, Esq., of Pelham, N. H. He makes it quite clear that his corn cost him but 53½ cents per bushel. We know Mr. CUTTER so well as a pains-taking and careful man, that we have no doubt whatever that his statement is correct. Well, then, kind reader, "go and do likewise," and make money out of *your* corn crop.

SMALL FRUITS.—How did the raspberries, currants, strawberries, gooseberries, blackberries, &c., succeed that *you set* last year? Add a few more to them this spring—you will be convinced by-and-by that there is profit in it.

THE GARDEN GENERALLY.—Get in peas to succeed those sown in April—plant an asparagus bed if you have none—sow lettuce, parsley, onions, and all the vegetables desired for the table.

CARROTS.—There is no certainty of a good carrot crop unless they are sown early; the moment the soil is suitable in May, get in the seed. And now one word for

THE ORNAMENTAL.—If it has not been done before, strike out a simple plan for a garden which shall be in some degree ornamental, and at the same time not much obstruct the operation of the plow. Work constantly *to* this plan, and it will soon grow into beauty under your hands—and the beautiful will really be a *heart's-ease* in your garden. We do not urge anything intricate, expensive or extravagant; simply a path or two, and a pleasant border from which to look over upon your fine beds of garden sauce, tomatoes, and melons, and squashes, and sweet-potatoes, and egg-plants, and savory herbs. The *conception* of the thing is the most difficult; when this is done, the job is half accomplished, and you at once determine to indulge a little in THE ORNAMENTAL. "Whoa! gee a little, Billy," great care is necessary among these young trees!

EXTRAORDINARY COW.—We published a few weeks since Mr. Hobart's statement relative to a cow which he has—three and a half quarts of whose milk produced a little more than one pound of butter, being a better yield of the butyraceous qualities—or, considerably exceeding the statement made a short time since in the *Ploughman* by its editor, Mr. Buckminster, concerning his extraordinary Devons—these yielding a pound of butter to four quarts of milk. Mr. B. however must yield the palm to our neighbor, Mr. Hobart, who, by the way, has at our request furnished our readers with the following additional statement, relative to his extraordinary cow:

MR. EDITOR:—Sir, In answer to your inquiries in regard to my cow, I reply:—She is of the common native breed, dark red color, medium size, weighing, I should judge, between six and seven hundred pounds, and is ten old this Spring. Her only keeping has been corn stalks, and common English hay. She had no meal or any other food, than the above mentioned.

—*Amherst Express.* R. B. HOBART.

RANCID BUTTER.

BY OWEN MASON.

"A French scientific journal states that it has been ascertained by frequent experiments, that the bad smell and taste of butter may be entirely removed by working it over in water mixed with coloride of lime. The discovery was made by a Brussels farmer, whose practice is to take a sufficient quantity of pure cold water to work it in, and put into it from 25 to 30 drops of chloride of lime for every 10 pounds of butter. When it has been worked until the whole has been brought into contact with the water, it should be worked again in pure water, when it will be found to be as sweet as when originally made. The experiment can easily be tried, and we commend it to our citizens who are driven to the necessity of buying rancid butter, or of using none.

Another effectual mode of renovating butter is said to be, to churn it over with milk until the old salt and bad taste are all removed, and then work it over and salt it afresh. We find the above in the *Syracuse Star* and think it may be worth a trial."

The above article has been extensively copied into agricultural as well as political newspapers. We have tried both of the methods described, as well as some of our own, and have found them all utterly ineffectual for the renovation of butter that has once become rancid. The best disposition to be made of such butter is to put it into the receptacle for soap grease. Anything so offensive, to all but those of the coarsest taste, must be unwholesome.

Pure butter, that is salted with pure salt, may be kept for years without becoming rancid; this we know to be a fact, and butter makers would do well to inform themselves of all the causes productive of rancidity, or any other quality that interferes with its preservation or injures its flavor and relish.

In an editorial article of the *Journal* some weeks since, almost all the poor butter was charged to the want of skill or attention on the part of the dairy women. A correspondent, whose communication is rather too long for publication, comes up to the defence of this useful class of the community, and attributes nearly all the poor butter to the neglect of farmers in providing suitable places for the keeping of milk and butter. A short essay, by one of the best judges in the State, was published in the transactions of the Rhode Island Society for Encouragement of Domestic Industry, and in pamphlets for general distribution, in which the author, while he does not overlook the circumstances influencing the quality of butter noticed by the *Journal* and its correspondent, points out several others, and very comprehensively the means of avoiding them.

That writer considers that the use of *impure salt*, from Liverpool and Onondaga, is one of the most common causes of that rancidity and bitterness that characterize, in a greater or less degree, by far the greatest portion of the butter brought hither from New York.

That the quality of butter made in New York has constantly deteriorated, from whatever cause, we think is undeniable. Time was when there was no difficulty in procuring a prime article, and "Goshen butter" had a reputation equal to the best products of our own dairies; but of the butter for winter use, sold in this market during the past two years, three-fifths would be branded as *grease* in England, and it deserves no better name any where.

The exorbitant prices it has commanded for some time past seems to have produced a perfect recklessness in regard to its quality, both on the part of the makers of it and the large dealers, and the market has at length become glutted with the execrable stuff. We wish no greater punishment to them than that they should be compelled to eat the article with which they hoped to grease the throats of their customers at the rate of 30 cents per pound. Good butter is both a necessary and a luxury, and it constitutes a most important item in the disposable products of the farm; the whole community are therefore interested in having all the causes investigated and exposed which contribute to the deterioration of its quality. and the authorities of New York are specially interested in ascertaining what portion of the mass of bad butter, sent from that State, is fairly attributable to the employment of impure salt. We have seen many analyses of the New York salt, some purporting to have been made by authority, and all representing it of the purest kind. That the purest salt may be made from the brine springs of Onondaga there is no doubt, and yet it is difficult to find commercial samples, even of that which is sold under the name of "dairy salt," in which the presence of lime, magnesia, and sulphuric acid, may not be detected by the appropriate tests, showing contaminations of two or more of the following articles, viz.: Epsom and glaubers salt, sulphate of lime and the chlorides of calcium and magnesium—precisely such ingredients as a chemist would prescribe with which to make bitter butter.

Very recently, at our suggestion, a friend has subjected to chemical examination every variety of salt to be found in this market. Among the six or eight varieties examined, that from Syracuse, called dairy salt, was the most impure, while the purest variety was that from St. Martins, as prepared and ground by Messrs. Sweet and Angell.

The term "rock salt," though erroneously applied, is meant, *in this vicinity*, to designate the clean, coarsely crystallized article, produced by solar evaporation and imported from the West India Islands. The very best samples of this salt are always procured by our most skilful butter makers, by whom it is carefully washed, dried and pounded or ground very fine. If carefully selected and thus prepared, it is generally sufficiently pure for the purpose. If any doubt of its purity exist, it may be determined by the following process. If istilled water cannot easily be procured, collect some rain water as it falls, in a clean earthen pan, (not from the roof,) and in it dissolve a portion of the salt. Take half a gill of the solution and add to it three or four tea spoonfulls of a solution of *carbonate of soda*, and boil in a glass dish or a well tinned vessel a few moments, then pour into a tumbler. If the solution become milky, and a white sediment form, the presence of lime or magnesia, or both, is certain. Into a wine glass of another portion of the solution, put drop by drop, a solution of *chloride of barium*, and if the liquid become milky and a white precipitate form, the presence of sulphuric acid is certain. Salt upon which these tests produce these effects is unfit for butter-making. If, however, the solutions show

only a very slight milky tinge, as when a drop of milk is added to a wine glass of water, the foreign contaminations are not in such quantity as to materially injure the salt. These tests are easily applied, inexpensive, and sufficiently decisive for practical purposes. The carbonate of soda and chloride of barium can be procured of any scientific apothecary.

We commend the essay alluded to above to those who are engaged in butter making. Copies can be obtained of the Secretary of the Rhode Island Society for the Encouragement of Domestic Industry.

FRAUD IN BUTTER MAKING.—The recent exposures that have been made of the adulteration and *manufacture* of milk in New York, are so disgusting in their details, that we should suppose an inhabitant of that city could hardly look at a milk pot without a sensation of nausea. It would seem, from the following article, that similar practices are resorted to in the making of butter, but we defy the most ingenious rascality to make, of whatever materials, a worse article than is now often sold in the market:

"The *Boston Herald*, in an article on this subject, says unprincipled speculators have been, and are still at work adulterating butter prepared for the market—though the blame is generally thrown on the dairies. From evidence that has come to our knowledge, says the *Boston Herald*, we are persuaded that this adulteration is extensively practised. A correspondent who has purchased and tested the base article, writes as follows:—'A new fraud appears to have been discovered in butter-making. The fraud is this: The butter-maker adds a substance which appears to be of a vegetable nature to the real butter. A dealer of whom I purchased a few lumps, told me that the expressman who delivered the butter to him from Greenfield, acknowledged that when they churn the cream, it is now an almost universal custom to put *rennet into the butter milk*, to turn it to a cheese, and so work it with the butter for market, increasing the quantity about thirty per cent. I discovered the fraud by melting the butter in the oven, and found that a substance equal to one-third the original weight was left. The person of whom I purchased the butter says that this fraud is very extensively practised, especially for the New York market.'"—*Providence Journal.*

For the New England Farmer.

LEGISLATIVE AGRICULTURAL MEETINGS.

FRIEND BROWN:—I perceive this series of meetings wound up, a little before the subjects assigned for discussion had been exhausted. The last of these, if I remember right, was, "In what manner can the State best advance the interests of the farmer!" This is a topic, peculiarly appropriate for such an assembly, provided you can get them there. But if they won't come in, it must be met in some other form.

In all the reports of the discussions, the last winter, little or nothing has been said about the education of the farmer, or the establishment of schools for this purpose. Is this idea to be abandoned? Or is it deferred only to some more convenient season?

It is gratifying to learn that something is about to be done, by way of experiment, on the State farm at Westboro'. This, in my judgment, is the best thing that has been started by the Board of Agriculture; both in illustrating what can be done, in the application of the principles of science to culture; and in the preparation of a numerous class of laborers to superintend this culture. One hundred young men will annually leave this institution, and come upon the community under the necessity of earning their livelihood. How important is it, that they shall be well fitted to do this. When I took my pen in hand, I thought of speaking in detail how this could best be done. But on the whole, I think it is most prudent to leave it in the care of those, on whom it devolves, by order of the Legislature.

April 8, 1854.

PREPARING SEED CORN.

Many farmers who pride themselves excessively on their practical wisdom, denounce the idea, now very prevalent among the more intelligent part of the community, that the corn *plant* can in any way be benefited by preparing the seed, before planting it. They cite nature to substantiate their scepticsm, forgetting that where nature proceeds exclusively upon her own original system, she very rarely has to contend with obstacles which operate so fatally against the artistic operation of her laws in the care of human enterprise and effect. In the natural propagation of fruits and vegetables, an excess of seed is invariably disseminated, so that if a large portion should perish, or be destroyed, enough, and more than enough, would be left to realize the design originally intended. But man adopts a different system. He intends to sow and plant only enough "to grow:" consequently it is of the utmost consequence that it *should grow*. Hence he very often finds it advisable to assist the efforts of nature by the power of art. In regard to preparing seed corn, a very successful experiment was made some years since by MR. LANSING WETMORE, of Pennsylvania, and which has been repeated by several cultivators of intelligence and veracity, in other sections of the Union, with equally fortunate results. The *modus operandi* is reported by MR. WETMORE, in his published account, to have been as follows:

"At noon of the day before planting, 18th of May, I put my seed corn to soak in a strong decoction of copperas water, say two pounds of copperas to warm, soft water sufficient to cover a bushel of corn. The next morning took out a peck, added a pint or more of soft soap, stirred it thoroughly, then put on plaster enough to make it convenient for planting, say one quart. The whole field was planted with the seed thus prepared, with the exception of four rows, which were planted with seed without preparation. The after culture of the whole was alike,—passing through each way with the cultivator twice. The four rows last mentioned were cut up, harvested, and the corn weighed and measured by itself; also, four rows next adjoining, the seed of which had been

prepared as above. The produce of the four rows from the unprepared seed, was eleven bushels and a half. The produce of the four rows from the prepared seed, was seventeen bushels—a difference of five and a half bushels of ears in one hundred and twenty hills!"

It takes about six quarts of corn to plant an acre, at the usual distances, say three and a half feet each way; so that for six quarts of seed corn, six ounces of copperas would be required—an ounce to a quart is near enough as a general rule.

Wheat growers and gardeners well know the value of liming wheat, and steeping garden seeds where they desire an early and vigorous growth. A little aid to the corn plant while the weather, perhaps, is too cool, or the plant does not find the sustenance it needs in its immediate vicinity, will give it such a start as to keep it in advance of other plants not so treated throughout the season. We can see this in the fields of smaller grains, where a plant which started early and vigorously keeps the precedence over its fellows throughout the season, and in the autumn has perfected a crop proportionately large.

For the New England Farmer.

PROFIT IN RAISING CORN.

FRIEND BROWN:—Agreeable to my promise, I now send you, as near as I can, the cost of raising and the profits of three acres of Indian corn, grown on my farm the past year. The land was a light, sandy loam, and had been in grass 7 years, one-third part of it very thin and poor, and the crop suffered considerably by the dry weather. the following is the account:

	Dr.
Manure, ($82, one-half of it)	41,00
Plowing	12,00
Harrowing	3,00
Furrowing, one way	1,50
Seed	1,00
Planting	4,50
Hoeing, three times	18,00
Cutting and getting stalks	8,00
Harvesting	18,00
Rent of land	18,00
Total expenses	$125,00
Deduct fodder	45,00
Cost of corn	$80,00
	Cr.
Cr. by fodder	45,00
Cr. by 150 bushels corn	150,00
	$195,00
Deduct expenses	125,00
Net profits	$70,00
Cost of corn per bushel	53½ cents.
Profit per acre	$23,33½
Cost, per acre, of cultivation	$41,66 6-10

Of course, the cost of cultivating corn must vary much with the different kinds of land. The above was free from stones, and very easy of cultivation, generally, but was infested with witch grass that made the expense of hoeing much greater. The manure is estimated at $1,00 per load of 30 bushels, was composted in the barn cellar, mostly, and was good—was plowed in 9 inches deep. There was a compost of plaster, hen manure and ashes dropt in the hill, a large handful to 2 or 3 hills, and the work charged at $1,00 per day, although some of it cost me much less. By the above it will be seen that a man must raise about 32 bushels per acre, to pay the expenses of manuring and cultivating. B. F. OUTTER.

Pelham, N. H., March, 1854.

CONCORD FARMER'S CLUB.

THURSDAY EVENING, MARCH 31, 1854.

The subject for discussion was—"In what way can our milk be disposed of to the best advantage."

Dea. Tarbell submitted the following statement as the result of his experience, in selling milk and making butter.

He keeps eight cows uniformly—when milk sells at 18 cents in summer and 22 cents in winter, per can of 8 qts.,—he receives $25 less than he would, if he made the same into butter. When milk sells for 19 cents in summer, and 23 cents in winter, his 8 cows yield him $11,50 less than they would if he made butter. When he sells his milk in summer for 21 cents, and in winter for 27 cents, which is the price for the present year, he receives $25 more than he would, if the same milk were made into butter. He does not take the labor into consideration in the foregoing statements, but thinks it would cost $25 more this year, to make butter, than to sell the milk, thus making a difference of $50 this year, between selling milk and making butter,—the same being in favor of selling the milk. Dea. TARBELL furnished the following statement of income from 8 cows, for 3 years.

In 1846, he sold milk for	41,51	
Butter	152,27	
Calves	46,79	
Value of skim milk	20,00	
Value of butter used in family	32,50	$293,07
In 1847, he sold milk to amount of	36,99	
Butter	155,08	
Calves	47,20	
Value of skim milk	20,00	
Value of butter used	31,50	290,77
In 1848, he sold milk to amount of	231,25	
Calves	35,32	266,57

The Dea. gives his cows no grain except a very little in the spring.

E. WOOD, Jr., has milked 23 cows during the past winter; each cow has given him over $60 worth of milk. He gives each cow 4 quarts of grain per day, 2 quarts of oil meal and 2 quarts of Indian meal or shorts—amounting in value to $18 per year for each cow. Mr. WOOD thinks it more profitable to sell milk than to make butter, at the present prices for each.

Dr. REYNOLDS thinks making butter would be more profitable than selling milk, if good butter cows were selected. He thinks from one-third to one-half of all the cows selected for milk, are not good cows for butter.

JACOB B. FARMER, thinks if the farmer has sufficient help, it will be more profitable to make butter; but if he has to hire his female help, it

will be better to sell the milk. His cows have all averaged him $7 per month for each cow, during the past 3 months.

The club chose Dr. Reynolds, J. B. Moore, E. Wood, Jr., and Simon Brown, a committee to assign experiments to each member, to be tried, during the present year.

The club voted to meet at the house of the Secretary, on the 13th of April, to consider the assignments above referred to. They also voted unanimously to partake of a supper with their ladies and invited guests, at the Middlesex hotel, on the 19th of April.

C. W. Goodnow,
Secretary of the Club.

In accordance with the above vote, the Club met on the 13th of April, and voted to try the following experiments during the coming summer, which several experiments were assigned as follows, to different members of the Club.

Experiment 1.—To plant an equal number of hills, of the 12 rowed, and of the 8 rowed Plymouth corn, and weigh the product of each, in the fall. The cultivation and soil to be as near alike as possible.

Assigned to C. W. Goodnow and J. B. Moore.

Experiment 2.—To cut the stalks on 50 hills of corn, at the usual time, cut up 50 hills at the ground, when the corn is glazed, and let it mature in the shock, and let the stalks remain on 50 hills until fully ripe, and weigh the corn on each, when dry.

Assigned to J. B. Farmer and J. P. Brown.

Experiment 3.—To plant equal areas with corn 3½ feet apart, each way, and 3½ feet one way and 18 inches the other way, and weigh the corn on each, when dry.

Assigned to Simon Brown, Daniel Tarbell and F. A. Wheeler.

Experiment 4.—To plant the same quantity of ground with corn, of the same kind, with compost manure, at the rate of 25 loads to the acre, and with guano, at the rate of 250 lbs. to the acre, and weigh the corn in the autumn.

Assigned to Jos. D. Brown.

Experiment 5.—To take half an acre of grass land, spread 16 loads of manure on the same, then plow it 6 inches deep, harrow and furrow out without breaking the sod. Put 8 loads of manure in the furrow, and plant corn; again, take half an acre of grass land, plow the same 10 inches deep, spread on 24 loads of the same kind of manure, plow it in with a horse, and plant corn at the same distance, as in the other piece, and *measure* the corn raised, in the fall.

Assigned to Charles A. Hubbard, J. Warren Brown and Levi Miles.

Experiment 6.—To sow not less than half an acre of winter blue stem wheat. State the mode of cultivation, the quantity and weight of wheat raised, and the quantity of seed to the acre.

Assigned to Simon Brown and J. D. Brown.

Experiment 7.—To sow equal areas with a peck and with half a bushel of millet seed, and weigh the result.

Assigned to E. Wood, Jr., and John Raynolds.

Experiment 8.—To sow 2 and 3 bushels of oats to the acre, and measure the crop.

Assigned to Cyrus Conant.

Experiment 9.—To sow equal areas of land, with carrots, 15 inches and 24 inches apart, other things being equal, and weigh the crop.

Assigned to A. H. Wheeler and Gardner Wheeler.

Experiment 10.—To plant equal areas with carrots, with compost manure and with guano, other things being equal, and weigh the products.

Assigned to J. B. Farmer, W. D. Brown and S. G. Wheeler.

Experiment 11.—Raise equal areas of Ruta Bagas, with compost manure and with guano, and state the result.

Assigned to J. B. Farmer and Edwin Wheeler.

Experiment 12.—To sow rye with 250 lbs. of guano, to the acre, by the side of rye, without any guano, and report the quantity and weight of each.

Assigned to E. W. Bull and J. P. Brown.

Experiment 13.—To spread 200 or 300 lbs. of guano to the acre on grass, and compare the result with grass on similar land without guano.

Assigned to E. Wood, Jr.

Experiment 14.—To spread on the same kind of grass land, 300 lbs. of guano and 20 loads of compost, and compare the results.

Assigned to J. B. Moore and Jona. Wheeler.

Experiment 15.—To compare the raising of turnips with bone-dust and with compost. Stating the quantity of each used, and the result.

Assigned to Minott Pratt and Simon Brown.

Experiment 16.—To compare the raising of turnips with super-phosphate of lime and with compost manure.

Assigned to J. B. Farmer and E. R. Hoar.

Experiment 17.—To compare guano with super-phosphate of lime, in the culture of corn.

For the New England Farmer.

ON RENOVATING SOILS.

Dear Sir:—In your Feb. No., is an article by Elihu Cross, Hoosac, N. Y., whose caption is enough to awaken every sleepy or lazy farmer in the country. It purports to answer the greatest question that has interested the farming community for many years. I examined it with interest; the theory is true, but it is impracticable, except the last paragraph, and this, in my humble opinion, is not the most perfect way of renovating worn-out lands. He says, seed your land thick with clover and let it grow without feeding for 2 or 3 years, and then you may remove the clover and plow up, when you will find it rich. Can Mr. C. believe that, to let the clover remain on the ground and waste away on the surface by bleaching and evaporation, is better than to plow it in when fully grown? In my opinion, he begins this paragraph on a false supposition, or it contains a contradiction in its terms. He cannot get a growth of clover on worn-out lands; it will not stock, as we term it, or come up, and grow on such lands; buckwheat will grow much better, and answer quite as well as a covering. I have for a long time considered that those plants that have a broad leaf are less exhausting than those that are

narrow and shade but little, but when fully grown, they should be plowed in while they contain the most esculent matter; this will lighten and enrich for the next crop, which should be put on as soon as possible; should the land be adapted to rye, sow immediately, let it stand until the next June, then plow and sow buckwheat again, and so continue until your land will stock with clover; then you may remove, as. Mr. Cross says, but don't sell it to be pressed and go to Massachusetts, as is the practice here in Vermont, where it grows near enough to be done with reasonable transportation to the line of the Railroad. Here is a new and alarming source of impoverishment to our farmers; hay, grain and vegetables, are grown on purpose to be sent out of the country, and this is a new source of impoverishment to our soil. I wish some able pen would take this evil up and show it more fully to our farmers; they think they are making money by farming, because they pocket $100 more, now, by selling off their hay, grain and potatoes, than when they spent it on their farms, when, in reality, they impoverish their lands in a ratio that will alarm them a few years hence, and leave them with a worthless farm, or nearly so.

A Vermonter.

CLASSIFICATION OF MANURES.

The following classification is taken for Stockhardt's Field Lectures. The best manures are given first.

I. Manures Rich in Nitrogen.

1. *Substance containing ammonia*, (very forcing.) Ammonical salts of all sorts, good guano, urates, and putrid animal substances, such as blood, flesh, skins, &c.; poudrette, gas-water, putrid urine, draining compost, fermented stable manure, especially of sheep and horses.

2. *Azotized substance that are easily decomposed*, (somewhat quickly forcing)—Horn-shavings, glue, boiled flesh, bones liquified by acid, steamed and highly pulverised, oil-cakes of all sorts, malt-grain and the refuse of beer-breweries, fresh urine, drainings, stable manure beginning to rot.

3. *Azotized substances that are decomposed with difficulty*, (slowly forcing.) Bone-dust coarsely powdered, woolen-rags, fresh stable manure.

4. *Substances containing nitric acid*, (quickly forcing.) Nitrate of potash [ordinary saltpetre,] nitrate of soda or Chili saltpetre, nitrate of lime, or decayed stable-walls, rubbish of old clay walls, and old compost earth.

II. Manures Rich in Carbon: [forming humus.]

Stable-litter, straw, foliage, weeds, forest leaves, saw-dust, lawn and garden trimmings, rotten mould, turf, earthy brown-coal, and vegetable substances of nearly all sorts.

III. Manures containing Potash: [strongly forcing.]

Potash, nitrate of potash, malt-grain from beer-breweries, urine of breeding cattle, wood ashes, foliage, stalks and leaves of all sorts, lawn and garden trimmings, building rubbish, street-sweepings, compost, burnt clay and loam, marl of many sorts.

IV. Manures containing Soda: [less visibly operative.]

Common salt, refuse salt, Chili salt, saltpetre, soap boilers' lye, urine, certain sorts of manuring salts, soda felspar, and some other kinds of stone, soap-suds, dish-water.

V. Manures Rich in Phosphoric Acid [seed forming.]

Burnt bones, bone black, sugar refuse from refineries, phosphorite, and a few other kinds of stone, poor guano, raw bones, bone dust, true guano, animal substances of all kinds, oil-cake, malt-grain, from breweries, solid human and animal excrements, stable-manures, urine of carniverous animals, wood ashes, straw leaves, &c.

VI. Manures containing Sulphuric Acid: [partly direct manures partly absorbent of manuring substances.]

Gypsum, sulphuric acid, green vitriol, sulphur-coal, ashes of pit-coal, turf, and brown coal.

VII. Manures Rich in Lime.

Burnt lime, chalk, marl, gypsum, ashes, ashes of brown coal and turf, building rubbish, pond-mud, and soap-boilers' ashes.

VIII. Manures Rich in Silica.

Pit-coal ashes, as also ashes of all sorts, sand, straw, stable-manure, &c.

IX. Manures that Pulverise the Soil.

Sulphuric acid, muriatic acid, lime, marl, humus, &c.

X. Manures that Improve the Soil.

Lime, marl, loam, sand, pond-mud, vegetable mould, turf, &c.

Here is a fine classification of the chief manures that are employed as fertilizers. They should be chosen and applied according to the nature and condition of the soil, as well as with reference to the crop, that is to be produced. Many of the manures are compounds—hence the reason why you find them repeated in the different classes. The farmer should preserve this classification, and use it until he finds a better one.

For the New England Farmer.

BUGOLOGY VS. SQUASHOLOGY.

Mr. Farmer:—The remedy prescribed by one of your correspondents is much like one I once heard from a celebrated physician.

A particular friend of mine, an eminent professor and president of a medical college, and withal a popular man, particularly with the ladies, for his varied knowledge, social qualities, love and knowledge of botany, flowers, &c. &c., was conversing with a bevy of young ladies. Among other things he told them they could eat as many onions as they pleased, and by eating another article all the effect would be so neutralized that no one would suspect they had ever seen one. Their curiosity was excited, and all were anxious to hear the remedy. The professor gravely told them that after eating a hearty meal of onions, they should eat a quantity of *garlics*.

Now if your correspondent had a large plat of autumnal marrowfat squashes or cheese pumpkins—and they were attacked by an array of striped bugs—what would he do? Certainly, according to his theory, not plant melons and cucumbers among them.

A more certain remedy for bugs may be found in simple yellow Scotch snuff—just sprinkle it on their leaves—it will not injure them, and there will be at once a general stampede among the bugs. I have tried it nearly twenty years without fail.

C. Goodrich.

Burlington, Vt., 1853.

For the New England Farmer.

WHAT A GARDEN SHOULD BE.

The wood-cut accompanying this article represents the same plot of ground as did the one in the last week's paper, with this difference, that the former was, as too many are, inconvenient and ugly; the latter is arranged with an eye to both convenience and beauty. I do not mean to say that many may not criticise the present arrangement, but all must admit that the mere lines, irrespective of filling, present more agreeable and harmonious combinations to the educated eye, than those of the former plan. Doubtless, it may be said that the description accompanying that engraving was unfair, for there, all things are dirty, ill-kept and in confusion, qualifying circumstances which would destroy the beauty of any place; I admit that I did show the dark side, and *designedly*, for any one can make such allowances for the better as the more or less manifest necessity of the example before them demands. In the former case we have seen that when the proprietor wished to take his wife to ride, or to church, she must either get in at the barn, or else, after driving out through the gate at the end of the farm road to the front entrance he will there take her in; on his return, he will drop her, rain or shine, at the same place, to open the gate, and dodge the drops up the long path, or she must hold his horse, whilst he opens the great gate, getting out in the barn, run for the back door. As will be readily seen, the curved road, *f*, does away with this necessity; here there is but one gate, and from the carriage to either the front or back door is but a short distance; or should he wish to leave a barrel of flour at the kitchen, it is but a short distance to carry or roll it, without being obliged to cut up the grass.

So, too, the paths through the garden, to lead from the house and barn; they all bend in such a manner as to offer the readiest means of exit and entrance, without leaving sharp corners to be cut across.

The long, straight path up to the front door, rendering the house and its contents visible each time the door was opened, is gone, and the few trees, indicated, have broken off the direct sight from the street, whilst the flower beds, *h*, offer a pleasing object to the eye, when we step out in the cool summer morning to breathe the fresh air, or listen to the birds. To the house have been added the porch and verandahs, *j*, affording a cool promenade morning, evening and mid-day, and not only screening the windows from the hot sun, but when festooned with vines, furnishing more beauty than any other possible ornament.

Moreover, verandahs or piazzas, when trellised with wood, or better, a cheap arrangement of wire, offer one of the best opportunities for the growth of the grape, giving both beauty and fruit, or the woodbine with its rich summer green, and autumn red foliage, or the honeysuckle with its luscious fragrance, or the roses of every hue and shape. Where taste has been developed for such ornaments, and the commoner vines have been used, the Wistaria with its million clusters of purple blossoms, or the strong, sturdy Begnonia make a delightful variety.

The best vines for common use are the grape, (Isabella) the clematis, woodbine, (Ampelopsis,) the monthly trumpet honeysuckles, and the hardy roses; of one thing there can be no doubt, that for beauty, fragrance, fruit, and immediate ornament, the different varieties of vines are unsurpassed. *Could I have but one division of ornamental vegetation, I should take vines; and when properly arranged on the house, the dread of injury to the wood is entirely unfounded.* The entrance gate is carried a little back from the road, which gives greater ease of access, and admits the tying a horse aside from the street.

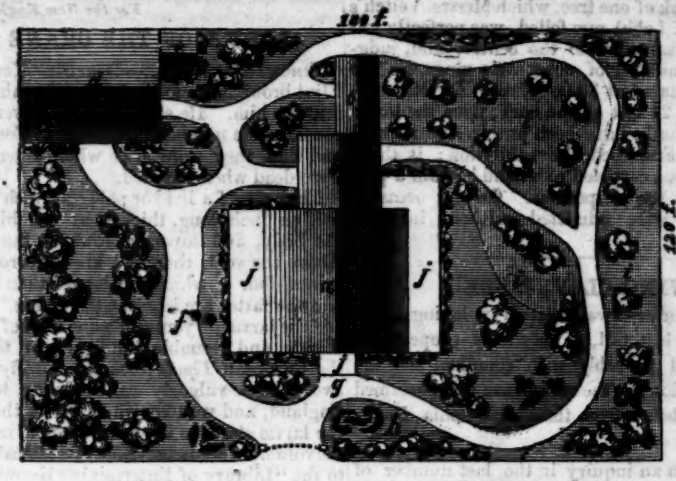
We do away with the pile of manure, altogether, by digging a cellar to the barn, and cover the *small, outside pig-sty*, with shrubs and vines; we also have put some vines about the barn; probably the grape.

Flower beds, *h*, are cut out of the grass, and should be kept well filled with flowers of a uniform size and time of flowering; those directly in front of the house may be planted with a variety of bulbs which will begin to bloom as soon as the snow is off (Snowdrops) and end only with the frost; the interspaces may be filled with annuals, gillyflowers, gilia, mignionette, &c. The groups directly under the windows are ornamental shrubs; perhaps no more satisfactory outlay can be made than in a judicious selection of flowering shrubs; —get those varieties that will begin to bloom early (Cydenia,) and leave off late, (Althea;) get roses that do not blossom once only in the season, (old fogies,) but remordents, and perpetuals that will flower every month.

So, too, with flowers; get perennials as much as possible, and thereby *avoid the necessity of repeated plantings:* such flowers and shrubs *give the greatest amount of return for the least amount of trouble.* The groups of trees, from the middle of the west side, to the upper corner of the east, should be entirely ornamental, mostly deciduous, but a fair intermixture of evergreens; the best and cheapest Evergreens are Hemlocks and White Pine; one of the most beautiful, the Norway Spruce of whose beauty few can have any conception who have not seen it;—the Arbor Vitæ is well enough in the shade and as a hedge, but never makes a beautiful tree. From the deciduous trees, select those which have the most beauty of spray, other things being equal, for remember you are to see them through winter, and do not care to be looking at a lot of stubbed and blunt ends for six months, when you might be feasting your eyes with the most elegant and graceful combinations of buds, twigs and branches; for this, as for many other qualities, the American Elm takes precedence; *but be very careful not to scrape the bark of your ornamental trees, daubing them afterwards with any vile combinations of lime, sulphur and mud to kill the bugs, thus destroying one of the chiefest beauties of the trees, without doing any good, and too often causing much injury.* In the little green patch by the back door may be set one or more ornamental trees, as a protection to the shed, and a shade to the windows of the back side of the house; the same also at the corner of the barn, and in the bend of the carriage road opposite.

In the garden and other unoccupied grounds may be planted all kinds of fruit trees, *the more the better, as far as the room will permit;* in a small place, dwarf varieties of pear are best for their early maturity; *and as apples occupy a great deal of room, with but comparatively little profit,*

Village Homestead as it should be—Improved.



a. House.
b. Kitchen.
c. Woodshed.
d. Barn and Cellar
e. Pig-sty.
f. Main Carriage Road.
g. Path to front door.
h. Flower Beds.
i. Kitchen Garden and Orchard.
j. Verandahs.

it will be best to reduce their numbers, and increase the other kinds; beside the fences and paths, set currants, gooseberries and raspberries; of the two former, the tree varieties are best, as they do not sucker. Having thus given a detailed account of the necessary changes, I will close with reiterating that however pleasing the arrangement of lines, trees and flowers is in itself, it is absolutely nothing, *unless the owner is ever active in keeping the whole place in a state of repair; nothing can compensate for the absence of neatness.* We may have been deceived, and have purchased almost worthless varieties of trees and shrubs, but that is no reason for allowing them when planted to become a disgrace to the garden; if good for nothing, pull them up, and if unable to buy others, let the green grass fill their places; if possible to disencumber ourselves of the idea that the greater or less first cost constitutes cheapness, believe the experience of those best qualified to judge, *that it is never economy to buy ill-shaped, unhealthy trees, or bad varieties because they are sold low;* nor *yet that it is good economy* to get trees &c., from the woods, *because they cost nothing;* taking into account the first cost of getting them, the long time they stand, almost bare poles, and the usually inferior shapes they assume when they do grow after much pruning and coaxing, *nursery trees are far best and cheapest.* I have no time to enter upon the minutæ of roots and branches to prove this, as may easily be done, but must leave that for the future. In respect to gates and fences, build the cheapest consistent with strength, the most unpretending and unobtrusive, for there is no surer indication of bad taste and pretensions, than a *costly* carpenter's *monument* of white pine and white paint. Make the fence simple, of good but cheap material (rustic poles *very good!*) and then paint it a dark color; why cover your fences with white, so as to force your boundary lines on your own and every one's else eye, at the same time making a direct violation of the harmonies of nature; the same may be, and has been said of painting houses. What can be more glaring and disagreeable in a hot day than the sunny side of a white house, dazzling the eye, as much as the sun! Vines and trees relieve the glare, somewhat, but the effect is almost always forced and unnatural.

Is the argument of the durability of white, (*even if it can be proved to be more lasting than other colors*) enough! Did any man ever wear iron pants and coat for their durability! If durability is the aim, build of stone, when you will get it, and harmony of colors at the same time.

Finally, we all remember that neatness, order and beauty outside, indicates the same within; and to quote from a learned European, "the care of flowers and cultivation of plants, do not merely contribute to the maintenance of health; they soften the passions, and elevate the taste above the affairs of every-day life. In the home around which we see a well kept garden, internal order almost always prevails; and where there is a flower stand outside, there is almost always a book shelf within." R. Morris Copeland.

Roxbury, March 24, 1854.

Extraordinary Exotic.—A fine specimen of a magnificent tree, recently introduced into this country from California, is now growing in the neighborhood of Exeter, at the nursery of Messrs. Jeitch. This tree, from its extraordinary height and large dimensions, may well be termed the monarch of the Californian forest; it grows in a solitary district on the elevated slopes of the Sierra Nevada, at an elevation of 5,000 feet from the level of the sea. From 80 to 90 trees exist, all with in the circuit of a mile, and varying from 250 feet

to 320 feet in height, and from 10 to 20 feet in diameter. The cones are about two inches and a quarter long, and two inches across at the thickest part; the trunk of one tree, which Messrs. Veitch's collector (Mr. Lobb) saw felled, was perfectly solid, from the sapwood to the centre, and, judging from the number of concentric rings, its age has been estimated at 3,000 years. Of this vegetable monster 21 feet of the bark, from the lower part of the trunk, have been put in the natural form in San Francisco for exhibition; it there forms a spacious carpeted room, and contain a piano, with seats for 40 persons. On one occasion 140 children were admitted without inconvenience.

SOWING CLOVER SEED.

Where clover seed was omitted in laying down lands to grass last fall, it may very properly be done now, and probably with complete success. Our own opinions on the subject are well sustained in the article below from the Philadelphia *Dollar Newspaper*.

In answer to an inquiry in the last number of the "*Newspaper*," as to the best time to sow clover-seed, I remark that it is my opinion that the spring or winter is the best time, for the following reasons: Clover sown in the fall, is apt to be killed. First.—By the dry weather which usually prevails in October and November. Second. If the weather is favorable, and the clover should get a start, the action of the frost would be more liable to destroy the young and tender roots, especially in a clay soil, where I have seen the clover drawn entirely from the ground, by the expansion of the soil from frequent freezing and thawing. I have always succeeded by sowing in March. The first good snow that falls in the month of March, sow your seed, and, as you can see it on the snow, you can sow it more evenly than when sown on the ground, and when the snow melts, it leaves the ground soft and moist, and the seed is buried evenly at the proper depth. When the first warm weather comes it springs up and becomes sufficiently vigorous to live through the succeeding fall and winter.

PLUMS—THE CURCULIO.

SIR:—As I am a reader of your *Weekly Tribune*, I saw a statement in your Address at our State Fair wherein you mention that Dr. R. T. Underhill, of your State, succeeded in saving his Plums from the ravages of the Curculio by planting his trees so as to have them hang over water. Now, since every one has not such a situation, I will mention how Mr. Joseph H. Mather, of Goshen, 20 miles south-east of this place, succeeded in saving his Plums this season. After having tried many ineffectual remedies, and when the Curculio had already commenced its work, he mixed sulphur and lard with a little Scotch snuff and rubbed it freely upon the body and branches of his trees. In a few days the Curculio had all left. The consequence was that he had such a crop of Plums that he was obliged to prop up the branches to keep them from breaking off.

I shall try the remedy next season. If you think the recipe worth printing, you can do so. I see no good reason why it will not do as well for others as for Mr. Mathews.—REUBEN CHAPIN, in *N. Y. Tribune*.

For the New England Farmer.

LARVÆ OF THE CRANE FLY.

SIMON BROWN, Esq.:—Dear Sir—Yesterday, Mr. Flint brought to me the bottle of grubs, which you sent by him. He said that they were found in considerable numbers, on snow in Concord lately, and that they were alive when taken; but they were dead when received.

They are of a livid or pale brownish color, about half an inch long, thickest at the hinder end of the body, and tapering towards the other end. Above the vent, there is a kind of coronet of short spines, four of which are longer than the others, and the latter are black at the points. These grubs are the larvæ or young of some kind of crane-fly or *Tipula*, and resemble the figures of the larvæ of the European *Tipula cornicina* and *Tipula oleracea*, two species vulgarly called daddy long-legs, in England, and well known there for their injury, in the larvæ state, to the grass-roots of meadows. In the volume of "Insect Transformations" belonging to the "Library of Entertaining Knowledge," will be found a short account of the European insects above named, pages 252 to 255 inclusive, to which I beg to refer you. The Concord grubs, like their European prototypes, probably lived in the ground upon the roots of grasses. How they came to be dislodged from their quarters I cannot tell.

Respectfully yours,

THADDEUS WILLIAM HARRIS.

Cambridge, Mass., March 16, 1854.

For the New England Farmer.

HOW TO MAKE THE BUTTER COME.

Mr. EDITOR:—I noticed in your valuable paper of Feb. 18th, 1854, an article headed "Why don't the butter come?" I have waited until now to see if some one would not give the information which Mr. JOSEPH H. WELLES, of Columbus, Ohio, inquired for; I would inform Mr. Welles that I suppose it is a species of garget that troubles his cows. I have been in trouble like his several times, and have as many times found that a little nitre, commonly called salt-petre, administered to my cows occasionally, has been an effectual remedy; in a dose not more than a table-spoon even full, given every other day, for two or three times; it is equally effectual in summer as in winter; pulverize it and give it in grain or meal.

E. MARSH.

Montpelier, Vt., March 13, 1854.

ELASTIC HORSE SHOE.—We are glad to find that the inventive genius of the day has been exercised for the direct benefit of the animal of all others the most worthy of such regard. Mr. J. O. Jones has invented and patented, and is now manufacturing in this city, an Elastic Horse Shoe, which is regarded by those who have seen and used it as an effectual preventive for all the troubles to the feet of the horse which are caused by constant concussion upon stone pavements and hard roads. The shoe is made of German spring steel, with India rubber inseated in the heels to give it elasticity.—*Traveller*.

For the New England Farmer.

FARMING IN NEW ENGLAND—NO. 4.

I turn aside this week from the regular series of papers on New England farming, to answer "Agricola," who puts to me in your paper of the 11th instant, the following inquiry:

"Will your correspondent 'D. C.' inform your readers *in what respects* the New England farmer cannot compete with the Western farmer, whether in the *profits* or *amount of produce?*"

On a close examination of this question, it appears to be extremely indefinite, and perhaps it may be said to be no question at all. The "profits" of farming are so necessarily involved in the "amount of produce" raised, that the two things cannot be separated, and therefore do not admit of a separate consideration, or of any direct comparison. I might, therefore, with entire respect to "Agricola," abstain from any argument upon the subject, till he presents the point of his difficulty in a more tangible form, or in a shape which involves some logical consistency and some real issue. How can any man institute any comparison between Eastern and Western farming, so as to show whether the former can "compete" with the latter, unless the "profits" of both are estimated, and how can such an estimate be made, unless the "amount produced," at the East and West, respectively, be taken into the account? If the Eastern farmer can raise one bushel of corn *as cheaply* as the Western, after the difference of interest in their landed investments—the difference in the price of labor and other expenses, the difference in the prices which they get for the bushel, when it is sold, are considered; it does not follow that they stand on the same level, because the much greater "*amount*" which the Western farmer can raise on his more numerous and richer acres, may most materially affect their relative incomes. It is an admitted fact that a farmer here who raises seventy-five bushels of corn to the acre, realizes a *greater percentage of profit*, than his neighbor who raises only forty bushels to the acre, for the expenses to the one, *relatively to the "amount produced,"* are less than those to the other. It is on this principle that we all regard those farmers in New England, who always raise the largest crops on the same number of acres, as the best farmers. They are the best farmers either because their lands are the best, or because they are cultivated the best, or both. On either supposition, they are the best farmers, because they bring about *the greatest results*, relatively to the expenses they incur.

Precisely so it is, *mutatis mutandis*, or as between the Eastern and the Western farmer, only that the Western has this immense additional advantage in his hands, he can put *many more acres* every year into corn, relatively to the Eastern farmer, than the best Eastern farmers can, relatively to their competing neighbors. The "profits" of farming, then, both at the East and the West, are so intimately connected with, or rather so indissolubly involved in the "amount produced," that no intelligent or intelligible argument can be instituted between them.

But I would recall the attention of "Agricola" to the real and obvious meaning of my argument, on which his inquiry is based. I did not say that the New England farmer cannot, *under any circumstances*, successfully compete with the Western, but that he cannot do so, without bringing to his aid the helps of science, and of superior industry and skill. Summoning these to his assistance, he will approximate much more nearly to his Western competitor, in valuable results, if he does not actually exceed him. "Agricola," therefore, has presented a question which, in its own terms, is logically absurd, and one which does not grow out of my argument, considered in the conditions in which it is stated.

But, waiving both these difficulties in the way of making any direct reply to his inquiry, there are certain well authenticated and stubborn facts, which throw much light upon the general subject under consideration between us.

In the reports made to the Commissioner of Patents for the year 1852, by some of the most intelligent farmers in New England and the Western States, they state the average amount of wheat and corn raised to the acre, in their respective localities, and also the cost of production. There is a singular and wide discrepancy in the *results*, among the farmers of Maine and Vermont, for example, and an equal want of agreement among the farmers at the West, as to the average amount raised per acre, and the expense of producing the same. These statistics are therefore by no means so accurate and reliable as they should be, and yet some conclusions, approximative to the truth, can be gathered from them. By a somewhat careful collation of these numerous and discrepant reports, we come, I apprehend, to this general result. With regard to the article of *wheat*, in our imperfect and generally unscientific methods of cultivating the soil, we make no approach to a successful competition with the Western farmer, either as it regards the amount raised, or the cost per bushel. New England does not raise *one fiftieth part* of the wheat which is consumed by her own population. We should undoubtedly raise a much larger quantity, if it could be done profitably, but it cannot be done profitably, so long as our modes of cultivation are so imperfect, and the Western soils continue to be so highly adapted to its production. It is most manifest, therefore, that New England does not now successfully compete with the West in the raising of wheat, "either in the *profits* or *amount of produce.*"

In respect to corn, pork, beef, hides, wool, live hogs, butter and cheese, we stand in a somewhat better relation to the West, though the immense quantities of these articles which find their way from beyond the Hudson to the Eastern markets, will astonish any one who will examine the statistical returns on the subject. Of all these articles, we import for our own consumption a far greater amount, than we export of our own production, for the consumption of others. Indeed, we export none at all of our own producing. In not one of these important articles of living, do the farmers in New England supply our own wants, much less do we have any to spare for our neighbors in Ohio, Wisconsin, Virginia, New York, Ireland or England. So long, therefore, as our present mode of cultivation continues, it is as clear as the sun in mid heaven, that notwithstanding the higher prices which obtain in New England, we can never successfully compete with our Western friends, in any of the great branches of agriculture. That can be done, only by superior science, greater skill and more untiring industry. D. C.

Waltham, March, 1854.

REVIEW OF THE PAST AND THE PRESENT CONDITION OF AGRICULTURE.

I propose, in my first Report, to review the past and present condition of the Agriculture of Massachusetts. The past will be found, it is thought, full of interest and instruction; the present, full of encouragement and hope. The discussion of special subjects will be left to a future occasion, with the exception of such suggestions as seem to spring naturally from the facts stated. This seems, indeed, to be the only course which can be pursued. Previous to the organization of the present Board, there has been no permanent department or public officer, whose special duty it was to collect the facts necessary for the guidance of the Legislature, and the various societies in their efforts to advance the cause of Agriculture among us. The principal object of the Board, during the past year, has accordingly been to procure the desired information. It is these doings, which I now have the honor to report for your consideration.

We cannot, without some little reflection, make full allowance for the difficulties which surrounded the early settlers of New England. We must remember that they exchanged a country far advanced in civilization,—and notwithstanding its rude tillage and its large tracts of uninclosed moors, probably better cultivated than any other on the globe,—for one entirely new to them, with a climate and soil unlike any which they had known before. They were to begin a life in which their previous experience could afford them little or no aid, in a wilderness which was to be subdued by their own hands in the midst of a thousand obstacles. The system of cultivation which they had learned and practised in their own land, would not serve them here. They were to start anew, and acquire, painfully and laboriously, the knowledge which was applicable to their new situation. If we find their progress to be slow, let us not wonder that it was so; we should rather wonder that they advanced at all, or even that they did not perish in the wilderness amid the privations and the sufferings of winter.

For many months after their arrival, they had no beasts of burden; when at last a few cows were brought over from the mother country,* they were poorly fed on coarse meadow hay, and often died from exposure and want of suitable food, or fell a prey to the wolves and the Indians. Owing to the difficulties and expense of importation, the price was so high as to put them beyond the reach of many, even in moderate circumstances. A red calf soon came to be cheaper than a black one, on account of the greater probability of its being mistaken for a deer and killed by the wolves. When cows were so high as to sell in 1636, at from twenty-five to thirty pounds sterling, and oxen at forty pounds a pair, a quart of new milk could be bought for a penny, and four eggs at the same price.

It should be borne in mind, also, that the cattle of that time, even in England, were not to be compared with the beautiful animals now seen there. The ox of that day was small, ill-shaped, and in every way inferior to the ox of the present time. The sheep has, since then, been improved to an equal, or even greater extent, both in form and size, and the fineness and value of its wool. The draught horse, so serviceable on the farm, long the pride of London, and now equally of Boston, and the noble breed of race horses, so celebrated for their fleetness, were not then known. It is difficult to appreciate fully the changes, which the increased attention to agriculture has effected in domestic animals, even within the last century.

During the early part of the last century, the average gross weight of the neat cattle brought for sale to the Smithfield market, was not over three hundred and seventy pounds, and that of sheep, twenty-eight pounds. The average weight of the former, is now over eight hundred pounds, and of the latter, over eighty pounds. On account of the high price of cattle at that period, and the risks to which they were to be exposed, it is not probable that the settlers purchased even the best specimens of the animals then known in England. Such being the state of things, we may easily imagine that the first cattle imported into New England, were of a very inferior quality.

Nor was the difficulty of procuring agricultural implements the least of the obstacles which the early settlers had to encounter. Some were imported from the mother country, but all could not obtain them in this way. The only metal to be had was made of bog ore, very brittle, and liable to break and put a stop to a day's work. The implements of agriculture seem, for the most part, to have been made from this metal, and with comparatively little fitness for the purpose for which they were designed. Even those imported from the mother country were not only of the rudest construction, but were also extremely heavy and unwieldy; for the men of that time had not discovered the art of diminishing weight without lessening strength. The process of casting steel was not invented till more than a century later, (1750) and then it was kept a secret in Sheffield for some years. The number and variety of implements have been infinitely increased, even within the last half century, to meet the wants of a more advanced husbandry, to which, indeed, these mechanical improvements have, in their turn, largely contributed.*

It is true that the Pilgrims, on their arrival in this country, had the benefit of the plants at that time cultivated and used as food by the Indians, yet they were wholly unaccustomed to these, and were ignorant of the mode of using them as food, and of the manner of their cultivation. Indian corn, the staple product, and the pride of America, had never been seen by them. Pumpkins, squashes, potatoes and tobacco, were almost equally strange to them.†

* The first cattle were imported by Edward Winslow, in the ship *Charity*, March, 1624. Having been sent out as agent by the Plymouth Colony, he brought over four animals, three o which were heifers. One authority says they arrived in the ship *Ann*, the first voyage of which was made in 1623; but there can be no doubt that the cattle referred to, at the time of the distribution of cattle in 1627, came in a subsequent voyage made by that vessel

* The colonists do not seem to have been provided with plows; for we find that twelve years after the landing at Plymouth, the farmers about Boston, having no plows, were obliged to break up the bushes with their hands and hoes, to prepare their lands for cultivation; and even so late as 1637, there were but thirty-seven plows in the whole State. It was the custom, even to a much later period, for one owning a plow, to do most of the plowing in a town; going about from one part of the town to another. The town often paid a bounty to one who would buy and keep a plow in repair, to do work in this way

† The potato was so rare in England at the beginning of the 17th century, as to be served up only in very small quantities. It was sold at two shillings a pound, for the queen's table, and was used as a fruit, baked into pies, seasoned with spices and wine, and sometimes eaten with sugar.

When their necessities taught them the value of these plants, they were not slow in adopting the Indian methods of cultivating them. As the general cultivation, in the colonies, continued much the same for many years, with only slight modifications on the introduction of the plow, it may not be inappropriate to turn our attention, for a moment, to the agriculture of the natives.

It is well known, that most of the hard work necessary to supply their limited wants, fell to the lot of the women, assisted, sometimes, by old men and little boys. Among their thankless tasks was that of farming, which they carried on to an extent quite remarkable, when we consider the rudeness of the tools with which they worked, and the circumstances in which they were placed. They had no art of manufacturing metal, and of course could have no proper implements of agriculture. Their cultivation was not so rude, however, as one would naturally suppose. They made a kind of hoe by tying the shoulder blade of a moose, bear or deer, to a stick or pole.

The land, when selected, was cleared, by keeping up a fire around the foot of each tree till its bark was so burned that it would die. They then planted their corn. When a tree fell, it was burned into pieces of such a length that they could be rolled into a heap and burned to ashes. In this way, by degrees, a piece covered with wood, was wholly cleared. An industrious woman could burn off as many dry fallen logs in a day, as a strong man could, at that time, cut with an axe in two or three. They used a stone axe, made much in the same way as the hoe above described, to scrape the charred surface of the logs, and hasten the burning. This mode of clearing was common through the western part of the State. In the eastern part, the tree was sometimes girdled with the axe, and thus killed, was allowed to dry, and then burned by kindling a fire around it, as above described.

They taught the settlers to select the finest ears of corn for seed, to plant it at the proper time, and in a proper manner, to weed it, and to hill it. They were accustomed to dig small holes four feet apart, with a clumsy instrument, resembling the one described, which, in the eastern part of the State, was sometimes made of large clam-shells. Those living in the vicinity of the sea-shore, put into each hole a horse-shoe crab or two, upon which they dropped four, and sometimes six kernels of corn, and covered it with the implement with which they had dug the hole. In the interior, a few small fishes in each hill were used as a fertilizer. Beans were planted with the corn after it had come up, and grew up supported by it. Great attention was paid by them to the protection of their growing crops. Not a weed was to be seen in their fields, and the corn was carefully guarded against destruction by insects and birds. To prevent loss by the latter, a small watch-house was erected in the midst of a field of corn, in which one of the family, often the oldest child, slept, and early in the morning rose to watch the blackbirds. It was their universal custom to hill the corn about two feet high, for its support, and spots may often be seen at the present day, which were evidently cultivated by them. The colonists very generally imitated this custom, and it has been continued down to our own times. The men planted and cured their tobacco, which was, ordinarily, the only plant they worked upon, the women managing all the rest.—*Flint's Report of Mass. Board of Agriculture.*

For the New England Farmer.

THE CROW—WINTER WORMS.

Friend Brown :—I find in the weekly *New England Farmer*, Vol. 9, No. 3, an "Ode to the Crow," written by Mr. Soul, in which he gives that bird a bad name, looking only at the dark side of his character; now if this rule alone is to be observed, of judging of evil deeds, I fear we should have but very few birds, beasts, or men, that would not stand as low as Mr. *Soul* places the crow. It is my purpose now, however, to mention but one act of his kindness, which I noticed to-day.

You probably have received those worms I sent you, yesterday, which I found by the side of my meadow. As I was passing over that meadow, my attention was drawn to something on the snow and ice. I accordingly stopped, and on examination found great numbers of worms, which in their acts and looks, were unlike any thing I ever saw. I will not attempt to describe them, but as you have some of them, I wish you or some one of your friends, more able than myself, would do it. They were as thick in spots as a person would sow oats; some of them crawling on the top of the snow and ice, others in the water, whilst a great many were apparently crawling up through the ice and snow, all having life and animation. I looked on the ground where the snow was all gone, and there I found a number, but not having my glasses with me, I couldn't readily see them. But I have strayed a little from the crow, but not from his food. To-day, I heard a great cawing of the crows, and on looking up, behold! there were hundreds of them lighting and lit on the same piece of land where I had discovered the worms, apparently as happy as ever were pigs in clover, and as busy picking up something as ever a hen was picking oats. I waited until they were all gone, then went to see if they had taken any of the worms, and to my delight they had taken nearly every one of them that were on the snow, but I noticed that they were just as busy on the bare ground as they were on the snow, and I have no doubt but they found the worms as plenty there, although I could not see as many; neither have I any reason to believe that the worms were gone before the crows came, for there was a corner of the field on which the crows did not go, and there I found the worms after the crows had gone. Here, now, is one kind act which I believe to be of more real value than all the damage the crows ever did me. I hope they will continue to visit me daily for one month, at least. My particular object in writing this, is to know if these worms may not be the same as the palmer worm that infested our country last year, although they are somewhat changed in their looks and actions. If you, or any one else can give an account of them, and their habits you will much oblige,

J. B. Farmer.

Concord, March 10, 1854.

Remarks.—We would inform Mr. Farmer, that we sent the bottle of worms to Professor Harris, at Cambridge, and that to-day, the 18th, we have

received a note from him in relation to them which we will publish next week.

TENTH AGRICULTURAL MEETING,

AT THE STATE HOUSE, TUESDAY EVENING, MARCH 21.

SUBJECT,—*Neat Cattle—What is the best method of improving the stock of animals to be kept on our farms?*

The meeting was called to order by Mr. SIMON BROWN, Chairman of the Executive Committee, and Hon. B. V. FRENCH, of Braintree, was invited to preside for the evening.

Mr. FRENCH, on assuming the chair, introduced Mr. SANFORD HOWARD, of the *Boston Cultivator*, who proceeded to deliver a very interesting lecture on the subject of farm stock.

Mr. HOWARD opened with a succinct history of the *domestic ox*, its origin, kindred species, &c., which displayed considerable research and a full knowledge of the subject. The ox, he said, could not be traced to any extinct race of animals, or to any now in existence, and although there is generally supposed to be but one species of the domestic ox, yet there are different breeds, varying in their characteristics. Breeds are of two classes, natural and artificial, the latter being the result of man's agency—as the Ayrshire cattle may be called an artificial breed.

The object in breeding cattle should be to propagate varieties which combine most fully those qualities needed for a specific purpose, as for beef, milk, or labor. These qualities are somewhat antagonistical, particularly fattening and milking. Fat cattle should be marked by fulness and rotundity, while the milch stock should be characterized by flatness rather than roundness. The animal, too, which has the greatest tendency to fatness has insufficient muscle and nervous energy, for labor. Stock can be best improved by cultivating for specific purposes. Some farmers think a stock should be obtained which will combine *all* qualities, but this is unreasonable. No farmer expects to get his clothes, shoes, farming utensils, &c., all made by one individual; and on the same principle, he should rear stock for particular uses. A great point in rearing stock is to provide sufficient food and shelter, for until this is attended to, it is of little use to talk about breeds. Farmers lose immensely every year by insufficient feeding. As to *breeds* of cattle, nothing definite can be said, in reference to this section of country, because no adequate experiments have been made in this matter in this section of the country. Different breeds are required for different localities. Mr. HOWARD submitted the following list, as the best he could recommend:—

As Dairy stock, on poor and rough soils, the *Kerry* breed, which is indigenous to the mountains of Ireland, and represented by all authorities as combining a remarkable hardiness of constitution with superior dairy qualities, especially for butter.

2d. For better soils and milk-selling establishments, the *Ayrshires*.

3d. For cities and towns, the *Jerseys*, at the same time testing them by fair trials as to general adaptation.

4th. A selection from the common or so-called *Native* stock, to be subjected to a systematic course of breeding.

5th. Crosses of the *Ayrshire* and *Jersey* with the common stock, the offspring to be kept separately for such a period as may be necessary to test their qualities.

For fat stock, of secondary value for dairy purposes,—on poor and rough soils and severe climate, the *West Highland Scots*.

2d. For somewhat better soils, GALLOWAYS and DEVONS.

3d. For medium soils, HEREFORDS.

4th. For the best soils and a milder climate, the fattening variety of SHORT HORNS, tried also in comparison with the Herefords.

The Herefords, West Highlanders, and Devons are excellent draught cattle. Our climate is a very trying one for cattle, on account of its extremes of heat and cold, and this is one reason why the Short Horns have so seldom succeeded in New England. The Western Highland breed is a very hardy one, and fatten as readily the third year as any other variety. In England it is considered the model in the improvement of all other breeds as to form.

At the close of Mr. HOWARD'S lecture, Col. NEWELL, President of the Essex Agricultural Society, inquired of him the qualities of Ayrshire stock as working cattle.

Mr. HOWARD said he had never known full-blooded animals of this stock to work well. He, however, had no acquaintance with them as working cattle—only as dairy stock.

Mr. SPRAGUE of Duxbury, said he was familiar with the breeds of cattle kept on Mr. Webster's farm, embracing several foreign varieties. The farmer in charge esteems the Devons as the best working cattle. The Durhams are slow, although possessing great strength. Some people say that Ayrshires are smart and good workers, and others say that they are vicious.

Mr. SHELDON of Wilmington, said he had a yoke of Ayrshire oxen from the Webster farm at Franklin, N. H., which he purchased last August from Mr. Ames. They are stout, active cattle, fully equal to any he ever had. He thought he had never owned any cattle which would travel twenty miles quicker than they, although he had never owned lighter cattle. They plowed last year at Concord and obtained the first premium, fin-

ishing their lot six minutes quicker than any other. The Durhams he considered best for beef.

Mr. FRENCH, the Chairman, said that, after considerable experience in raising cattle, he had come to the conclusion, that the milking properties of an animal were matters of mere chance,—good qualities in this respect not being confined to any particular breeds. Ayrshire are about as good for milk as any, but their forms are not so good. The best ox he ever owned came from Worcester, and was of the Holderness breed. The Herefords are a good breed, well adapted to the country, large, good milkers, and making good beef. The Alderneys are very popular now, as yielding very rich milk, and being gentle, but they are not much for beef or working. The Devons are altogether too heavy for this section of the country; they may do well with the blue grass of Kentucky, but they generally fail on the short feed of this region. He had tried Ayrshires and Durhams, but had given them up, and was now trying Devons, which he found to be fair, good milkers. In England the largest recorded yield of milk, was given by a Devon. One good quality which they possess, is an almost unvarying uniformity of color, a pure red, which may vary a shade in different animals, and they possess great symmetry of proportion. Their beef commands a higher price in the New York market than any other, being sought after by hotel-keepers, on account of its juiciness. He felt well satisfied that his Devon oxen were unsurpassed by any other breed; they are smart and tractable.

Mr. LINCOLN, of Worcester, said he knew of half-blood Ayrshire oxen which were excellent working cattle, but had never seen any full-blooded. They are quick, active and hardy, and teachable, and what some called high spirited, but what he called *timid*. He owned all the Ayrshire stock of the late Col. LINCOLN, and did not think more gentle cattle could be found on any farm. He considered the red Ayrshires equal to any breed, and as surpassing the Devons in activity.

Col. NEWELL, of Essex, thought the foreign breeds of stock, should be kept pure. The Ayrshire, if kept pure, would furnish the best milk stock for Massachusetts.

Mr. DODGE, of Worcester, thought that as good a way as any, in raising stock, was to select the best animals, without regard to their breed. We have not paid sufficient attention to the subject in this country, to establish any general rules.

Mr. FRENCH alluded to the necessity for a State institution where the question of the comparative value of different breeds could be satisfactorily settled.

Mr. COFFIN, of New Hampshire, said a great deal must be allowed for difference of climate in different States. The great butter and cheese producing States of the Union are North of Pennsylvania. While in Florida more cows are kept in proportion to the population, than in New York, the latter produces 45 lbs. of butter per cow on an average, while Florida yields but one 100th of a lb. per cow. One breed of cattle may do best in a locality where another would fail.

Mr. BROOKS, of Princeton, thought farmers did not pursue their systems of stock raising long enough. It takes a good while for foreign stock to get acclimated.

The subject for next Tuesday evening, is—*Sheep; can they be advantageously kept on our farms? if so, the best kind for this purpose.*

For the New England Farmer.

THE "WITCH HAZEL."

OR, THE PHENOMENA OF RHABDOMANCY.

MR. EDITOR:—In your journal of Feb. 11th, I noticed a few remarks upon the Witch Hazel, and its utility in detecting the localities of water and precious metals in the earth; and I beg leave to lay before your readers a few additional facts, and some remarks thereupon.

A year or two since, I witnessed some experiments with the "hazel wand," and had an opportunity to test its action. A crotched stick was cut and carried in a perpendicular position, a branch of the crotch being held in each hand. The diviner, so to call him who carried the rod, slightly stooping, walked slowly along; for a short time the rod remained upright; but suddenly it commenced dipping, and continued so till it pointed directly to the earth below. This was repeated several times and it was found that in whatever direction this locality was approached, the same depressions of the rod would take place. But, in order to preclude the possibility of deception, two of those present held firmly in their hands the ends of the stick which extended beyond the hands of him who carried the rod. In this manner, the diviner approached the hidden water course, and the rod, as before, suddenly turned towards the earth; but so firmly was the stick held, that it was literally twisted and the bark was left in the hands.

This fully satisfied us that there was no deception, and further experiments proved, that in the hands of certain persons, the "hazel wand" would veritably indicate the localities of water in the earth.

The same diviner was requested to examine a certain piece of ground, and decide at what depth a supply of water could be found; after a few trials, he fixed the depth at eighteen feet. In the course of a month or two, a well was dug and water was obtained as had been foretold.

Again, at a dwelling-house situated on high ground, and where a scanty supply of water was obtained at a great depth, he made examinations, and according to his directions, a well was dug near the house, and a never-failing supply of water was obtained at a depth of only eight feet.

Instances of highly successful experiments might be multiplied, but, I forbear to weary any one's patience with miraculous predictions out of my own personal knowledge. I have seen several others try the experiment, but with no success, except in one case, and that only partial. The rod, in all cases which I have observed, rotated in the same direction, that is to say, from before, back-

ward; but upon mines of coal and iron, it has been ascertained, the rotary movement takes place in a contrary direction.

In the mining districts of the West, it is stated upon credible authority, that the viens of lead are discovered in this way, and that failures never occur, except in the hands of those whose nervous temperaments are apt to vary. But it is believed that the rod is attracted, not by the metal itself, but by currents of water flowing constantly over the deposits of lead.

With these facts before us, we must concede the existence of the divining power in certain persons. Rhabdomancy, or the method of divining as above described, has engaged the attention of the first philosphers from the earliest ages. It is not to be accounted for by any species of legerdemain or deception, nor solely by magnetism or electricity, though by these agents some plausible counterfeits have been produced. But, however nameless the invisible agent may be, we must concede that it emanates from certain localities in the earth, ready to act upon the organisms of all susceptible to its influence. Now this mundane agent must necessarily be developed by some action, chemical, material, or of the electric force, constantly going on in the earth. That such actions are taking place at all times and that they are attended with a remarkable evolution of force, is beyond a reasonable doubt. To quote another, "Force shows itself in every thing that exists in the heavens or on the earth. It pervades every atom; rules the motions of animate and inanimate beings, and is as sensible in the descent of a rain-drop as in the Falls of Niagara; in the weight of the air as in the periods of the moon. There is a physical power which not only binds satellites to their planet and planets with suns and sun with sun throughout the wide extent of creation, which is the cause of the disturbance as well as of the order of nature, but it physically binds man to man, and man to nature."

This universal distribution of force, joined with the extreme susceptibility of the nervous system to mundane agencies, constitute a *cause* capable of producing an *effect* as wonderful as any of the anomalous phenomena of the present day.

Let every one that feels an interest in the matter, test the action of the "hazel wand" in his own hands, and ascertain whether or not his nervous organism is susceptible to the influence of this invisible agent. "Study Nature and her operations," and the tide of superstition will flow back from the shores of the civilized world, presenting a broader, clearer view of the hitherto unsuspected relation in which we stand to the universe. SPARTACUS.

Lexington, Feb. 20th, 1854.

For the New England Farmer.

SAVE THE BONES.

MR. EDITOR:—I herein enclose two dollars for the *New England Farmer*, which still continues to be a plain, common sense paper, and the one price system I admire, which you spoke of in one of your late numbers. It gives me great pleasure to see that the people are getting interested in agricultural affairs, in the good old Bay State. I hope the time is not far distant, when the Maine people shall be more interested in the cultivation of the soil, which is at present but poorly done. There is one thing which I wish to make mention of, which is in regard to the bones which are thrown away, or kicked about for a season and then carted of with the rest of the rubbish, into some by-place. Now if every family would save them, it would be a profitable business for many people throughout the country, to collect and grind them for use. If there is any profit in shipping them to Europe, there must be in keeping them at home. I think they are worth as much as guano, pound for pound, if not more. I do believe there are thousands of dollars lost ever year, by throwing them away. S. W. JENNINGS

North Wayne, Me., 1854.

MIDDLESEX COUNTY SOCIETY.

The Middlesex County Agricultural Society offers the following Premiums for the encouragement of Agriculture, Household Manufactures, and the cultivation of Trees, within the County of Middlesex.

We would call the attention of our friends to the section on *The Dairy*, as one of unusual attraction and importance. In addition to the regulations there laid down, we would recommend to all competitors to *weigh their cows on the first day of June and the first day of September;* then, knowing the weight of each animal and the amount of milk yielded in a given time, a pretty fair calculation can be made as to the comparative value of large and small cows. We understand the committee on the subject will require full and precise answers to all the questions propounded.

FARMS.

For the best cultivated Farm, regard being had to the quantity of produce, manner and expense of cultivation, and the general appearances of the Farm—*all statements to be made in writing*,	$25 00
For the next best, one set Transactions of the Massachusetts Society for the promotion of Agriculture.	
For the next best,	12 00

PEAT OR BOG MEADOW.

For the best conducted experiment on not less than one acre of Wet or Swamp Meadow Land, in reclaiming the same for a period of at least three successive years, with an exact statement of the mode of reclaiming, expenses, &c.	12 00
For the best experiment on similar land, appropriated to the growth of Wood,	8 00

CRANBERRIES.

To the person who shall exhibit the best result from the artificial production of Cranberries, from seed or by transplanting, by experiments made in a term of not less than three years, in the County of Middlesex, accompanied by a full and particular description of the process of cultivation, $50,00, to be awarded by a Committee specially appointed for that purpose.

FOREST TREES.

For the best plantation of White Oak Trees, not less than one-half an acre, nor fewer than 500 trees thereon, to be raised from the acorn since 1839, and which shall be in the best thriving state in the autumn of 1854, one set Transactions of the Massachusetts Society for the Promotion of Agriculture.	
For the second best,	15 00
For the third best,	12 00
For the best plantation of White Ash Trees, not less than an acre, nor fewer than 150 trees thereon, to be raised from the seed, and which shall be in the best thriving state in the autumn of 1854,	15 00

For the second best, 10 00
For the third best, 5 00
For the best plantation of Elm Trees, not less than ¼ of an acre, nor fewer than 80 trees thereon, to be raised from the seed, and which shall be in the best thriving state, in the year 1844, 8 00
For the best grove of Sugar Maple Trees, not less than 200 trees, set out since 1849, and which shall be in the best thriving state, in the year 1854, 5 00
For the best 25 Sugar Maple Trees, set out since 1849, one copy of Emerson's Forest Trees.

Fruit Trees.

For the best Apple Orchard, not less than 75 trees, which shall have been planted or set out since the year 1844, and shall be in the best thriving state in the year 1854, 12 00
For the second best, 10 00
For the third, 6 00
For the best engrafted or budded Pear Trees, not less than 25 trees, set out since the year 1844, and in the best thriving state in the autumn of 1854, 10 00
For the next best, 5 00

A full statement, in writing, of the soil, mode of cultivation, and treatment in regard to insects, must be furnished to the committee.

Fruit.

Apples—For the best specimens, of at least 6 varieties $5 00
the next best, 6 00
the next best, 4 00
the next best, 3 00
the next best, 2 00
For the best single dish of Apples, 3 00
the next best, 2 00
the next best, 1 00
Pears—For the best specimens of at least 6 varieties, 6 00
the next best, 4 00
the next best, 3 00
the next best, 2 00
For the best single dish, 4 00
the next best, 3 00
the next best, 2 00
the next best, 1 00

The Committee on Apples and Pears are allowed $10, to be expended in gratuities, if they deem proper.

Peaches—For the best single dish, 3 00
the next best, 2 00
the next best, 1 00
Plums—For the best single dish, 2 00
Grapes—For the best show of varieties, 3 00
the best single dish, 2 00
the next best, 1 50
the next best, 1 00

Assorted Fruit.

For the best basket of Assorted Fruit, 3 00
the next best, 2 00
the next best, 1 00

Melons.

For the best show of Melons, 3 00
the best Water Melon, 1 00
the next best, 75
the next best, 50

And the Committee allowed $5 for gratuities.

Vegetables.

For the best show of Vegetables, $6 00
the next best, 5 00
the next best, 4 00
the next best, 3 00
the next best, 2 00

And the Committee to be allowed $10 more for single specimens, to be awarded as they shall think proper.

White Mulberry Trees and Culture of Silk.

For the best plantation of White Mulberry Trees, not less than 150 in number, which shall be in the best thriving condition in the autumn of 1854, 15 00
For the next best, 10 00
For the next best, 8 00
For the next best, 7 00
For the best specimen of Silk, not less than 2 lbs. 8 00
For the next best, 7 00
For the next best, 5 00

Certificates will be required of the manner and expense of growing the Silk, with evidence accompanying the same.

Agricultural Experiments.

For the greatest quantity of Rye on an acre, not less than 30 bushels to the acre, 10 00
For the greatest quantity of Indian Corn on an acre, not less than 75 bushels to the acre, 10 00
For the greatest quantity of Potatoes on an acre, not less than 300 bushels to the acre, 8 00
For the greatest quantity of Carrots to the acre, not less than ¼ of an acre, and not less than thirty thousand pounds to the acre, 10 00
For the greatest quantity of Wheat on an acre, not less than 30 bushels to the acre, 6 00

Flax.

For the best experiment in the cultivation of Flax, on not less than ¼ of an acre, with a full statement of the quantity of manure, quality of the soil, weight of crop, and method of cultivation, 25 00
For the next best, 15 00

Live Stock.

For the best Native Bull, not under 1 year old, 8 00
the next best, 5 00
For the best Ayrshire Bull, 8 00
the next best, 5 00
For the best Devon Bull, 8 00
the next best, 5 00
For the best Bull Calf, of any breed, not over 12 nor under 3 months, 4 00
the next best, 2 00
For the best yoke of Working Oxen, 8 00
the next best, 7 00
the next best, 5 00
For the best 3 year old Steers, 6 00
the next best, 3 00
For the best 2 year old Steers, 5 00
the next best, 3 00
For the best Milch Cow, native breed, 8 00
the next best, 6 00
the next best, 4 00
For the best Ayrshire Cow, 8 00
the next best, 5 00
For the best Devon Cow, 8 00
the next best, 5 00
For the best Bull and Cow of any foreign breed, not already enumerated in the above, each, 8 00
For the best Milch Heifer under 3 years old, of any breeds, 6 00
the next best, 4 00
For the best 2 year old Heifer, 5 00
the next best, 3 00
For the best yearling Heifer, 4 00
the next best, 2 00
For the best Heifer Calf of any breed, with a particular statement how it has been raised, 4 00
the next best, 2 00

None of the above animals, except Calves, will be entitled to premiums, unless they have been owned in the county of Middlesex at least six months previous to the time of exhibition.

Milch Cows and Heifers will not be entitled to a premium unless the owner furnishes a certificate, showing the mode of keeping, and quantity of milk given or butter made.

The Dairy.

The following premiums are offered through the liberality of the "Massachusetts Society for the Improvement of Agriculture," viz:—

For the best Dairy of Cows, not less than six in number, and which shall have been owned by the exhibitor, and kept within the County not less than five months previous to the Cattle Show, $75 00
For the second best, do. do. 50 00
For the third best, do. do. 25 00

All competitors will be required to pay the strictest attention to the following regulations:

1. The cows must be presented at the place of Exhibition, and answers, in writing, given to the following questions:

2. Where were they bred and raised?

3. What breed are they?

4. What is their age, respectively?

5. On what day did they drop their last calf?

6. At what time were they turned to pasture?

7. What was the kind and quality of pasturing?

8. What was the kind, quality and quantity of other food furnished them?

9. For how long a time was other food furnished?

10. What was the weight and *wine measure* of milk from each cow, or from all the cows, on

June	Morning	Evening.	Sept.	Morning.	Evening.
" 1,			" 1,		
" 2,			" 2,		
" 3,			" 3,		
" 4,			" 4,		
" 5,			" 5,		
" 6,			" 6,		
" 7,			" 7,		
" 8,			" 8,		
" 9,			" 9,		

11. If butter was made, how much did each cow make during the days above specified?

12. How much was made from the time of turning to pasture till Sept. 10?

13. How long is your cream usually kept before churning?

14. What is the manner of preparing the butter after it comes?

The Committee will require the affidavit of one or more persons, of the amount of milk or butter produced.

Fat Cattle.

For the best yoke of Fat Oxen,	$8 00
the next best, do.	6 00
the next best do.	4 00

A statement of the mode of fattening, and the expense of the same, must accompany the entry.

Swine.

For the best Boar,	$6 00
For the best breeding Sow,	6 00
For the best Pigs, not less than 3 in number, from 4 to 8 months old,	5 00
For the next best,	2 00

Horses.

For the best Stud Horse,	$10 00
For the best breeding Mare and Colt,	5 00
For the best 2 year old Colt,	5 00
For the best yearling Colt,	5 00

Poultry.

For the best live Turkeys, not less than 5 in number,	$3 00
the next best,	2 00
For the best live Geese, not less than 5 in number,	3 00
the next best,	2 00
For the best live barn-yard Fowls, not less than 5 in number,	3 00
the next best,	2 00

Plowing Match.

To owners of the twelve Plows which shall be judged to have done the best work with the least expense, on 1-8 of an acre,

Double Teams—1 Plow, $10; 2 do. $7; 3 do. $6; 4 do. $5.
Single Teams—1 Plow, $10; 2 do. $7; 3 do. $6; 4 do. $5.
Horse Teams—1 Plow, $10; 2 do. $7; 3 do. $6; 4 do. $5.

Trial of Working Oxen,

Will take place immediately after the delivery of the Address. All competitors in this trial must enter their names with the Secretary, before 9 o'clock on Tuesday. Trial to commence at 11 o'clock.

Spading Match.

For the best performance in spading, not less than ten inches in depth, on a piece of not less than sixty square feet of sward land; due regard being had to time, the thoroughness of the pulverization of the soil, and the state in which it is left for the reception of seed, the labor to be performed with a common square Spade. To commence at 10 o'clock.

First premium,	$5 00	Third premium,	$3 00
Second "	4 00	Fourth "	2 00
		Fifth "	1 00

Bread.

To women over 20 years, or married:—For the best home-made Wheaten Bread, made with yeast, and baked on the day before the exhibition, not less than 4 lbs.	$4 00
For the next best,	2 00
For the next best,	1 00
For the best, made by a girl under 20, and unmarried,	4 00
the next best	2 00
the next best,	1 00

Full statements of the whole process of making and baking will be required.

Butter.

For the best new churned Butter, not less than 12 lbs., a set of Silver Tea Spoons.	
For the next best,	2 50
For the next best,	2 00
For the next best,	1 50
For the next best,	1 00

Certificates of the manner in which it has been made and preserved will be required.

Needle Work and Household Manufactures.

The sum of Forty Dollars is awarded for the best specimens of the above articles, in such sums as shall be deemed proper by the Committee who examine the articles.

Machines and Tools.

To the person who shall produce at the Show any Agricultural Implement of his own invention, which shall deserve a reward, not exceeding *ten dollars*, to be competed for by any person though not residing in the County.

Certificates are to be produced to the Committee proveding its utility.

Agricultural Tools and Implements.

For the largest variety of the best Agricultural Tools and Implements,	$10 00

For the New England Farmer.

GUANO AND SUPER-PHOSPHATE.

Friend Brown:—I have read your paper from time to time, hoping that I should find some reliable facts in relation to the use of guano and super-phosphate, but as yet the statements of different journals and persons are so conflicting, that I am at loss to know which to purchase for my pasture. Paris works admirably; but I want to manure it, and it must be done with one of these articles. In my last, I informed you that I had six rows planted with corn. No. 1 guano, 2 phosphate, 3 guano and paris, 4 ashes, 5 paris, and no manure in the hill of the 6th. The 1 and 3 did not come up well, as there was but little rain after they were planted, and the guano was not dissolved. This replanted where it was necessary. The phosphate grew rapidly, and could be distinguished from the other, as far as you could see, the corn ripening off much the soonest.

Result on harvesting. No. 1, 125; 2, 120; 3, 108; 4, 100; 5, 100; 6, 95 pounds. Thus we see that the guano comes out ahead, but the worms ate the roots of No. 2, so it was not really a fair test. I am inclined to think that the guano is the most durable; but think the phosphate the best for corn, as it will not injure the seed, and will bring it forward rapidly, so that the frost will not injure it!

L. W. CURTIS.

Globe Village, Feb. 18th, 1854.

REMARKS.—There are numerous causes occurring to vary the experiments made with these fertilizers. Such as you have made will satisfy you by-and-by with regard to their value, respectively.

For the New England Farmer.

HORN SHAVINGS.

MR. EDITOR:—Will you inform me through your valuable paper what substances horn is found to contain by analysis (*a.*) and in what quantity they should be applied as a manure? (*b.*) Combs are manufactured on an extensive scale in this town, and horn shavings have been employed for fertilizing purposes to a large extent, formerly, and often with the most beneficial results; yet, from a want of the desired information, they have sometimes been applied in too large quantities or on unsuitable ground. Enough has been witnessed of their effects, however, to show that they are a most powerful manure, which, under the direction of the scientific agriculturist, would increase the productions of the soil many fold. Hundreds of tons of these shavings have been sold in late years for chemical purposes; the price at present is eighteen dollars per ton, and the question is, whether they are not worth more than that for agricultural purposes! (*c.*)

O. V. HILLS.

Leominster, 1854.

REMARKS.—(*a.*) The four principal organic parts of horn, that which would burn away, are,

Carbon,	51.99
Hydrogen,	6.72
Nitrogen,	17.28
Oxygen and Sulphur,	24.01
	100.00

(*b.*) Horn shavings have been exensively used in in England, as a fertilizer, and are considered as a very powerful and durable manure. Having had no experience in the use of this article, we are not able to say what quantity it would be judicious to use; but a person accustomed to applying manures would be enabled to judge of their activity by careful observation, and arrive at correct conclusions in a single season. As they are a powerful stimulant, we would recommend that they be reduced to a fermented compost, either by the agency of horse-manure, or acids. JOHNSTON says that one ton of horn shavings ought to enrich the soil as much as five tons of blood. In consequence of their dryness, however, the horn decomposes much more slowly than the blood. Another writer, we believe HOUGHTON, says they are generally allowed to agree best with gravelly and dry, sandy and stony loams, because as they are of a spongy nature and receive and retain moisture, they will so continue in the ground for a long time, and nourish the crops in the driest seasons. It ought not to be expected, therefore that so much benefit will be derived from horn-shavings the first year, as they will yield afterwards.

(*c.*) The refuse of horn was formerly sold in England for $10 per ton; what its present value is, under a better knowledge of the value of these specific manures, we are unable to say.

PLOWMAN'S SONG.

BY THE "PEASANT BARD."

Sweet are the fields where the clover is springing,
And blithe is the carol that floats from the bough;
And soft vernal breezes a gladness are bringing
To cheer me as gaily I follow the plow.

Though hard be my toil, and dew-drops of labor
Make damp the brown locks that encircle my brow,
No envy I feel for my ease-loving neighbor,
For pride more is mine, as I follow the plow.

The lordling may boast of his titular story;
The vote-seeking grandee obsequious bow;
What care I for all their nonsensical glory?—
A NOBLE OF NATURE, I follow the plow.

I muse upon those, while turning the furrow,
Who, call'd like Elisha, are glorified now!
Though hand delve in earth, yet the mind need not burrow,
But spring to the light, as I follow the plow!

Valley Farmer and Mechanic

For the New England Farmer.

EARLY JUNE BEET.

MR. EDITOR:—Below are a few lines about my Improved Early June Beet, originally in the flat turnip form, but now they run deep, and hold their bigness like Mangol Wurtzel, thus increasing the crop full one-third in weight per rod. It has been a maxim with me, (as you know when we have anything good, we want our friends to share,) to publish and circulate any thing I have, new or nice among my brother yeomen. Having found root crops quite profitable, when fed regularly to any and all my stock—promoting health, quietness and flesh, and to none more than swine. I have set about improving each kind, so as to obtain the greatest amount of the fairest roots. I have succeeded to my entire satisfaction, and much beyond my anticipation. Hereafter, I may give you another article on the subject; but just now, I will only say that I set out several bushels of my improved early June beet last spring, which did finely. I can now spare seed to any who wish to get it. I mention two surpassing excellencies of this crop. First, when the seed is soaked, it comes up so quickly, large and fair, that they can be hoed before the weeds start. Second, their rapid growth and early maturity gives an admirable feed for swine, just when they most need it. Sows and pigs like the variety, and eat tops and bottoms with avidity—with the increased milk of the sow, they grow as fast as the beets. Learning to eat and love these when young, they will winter on them perfectly well. I have now three fine sows with pig, that have had little else than roots, and weigh from 200 to 250. Milch cows

are much benefited by feeding them in the same way, before green corn comes. A second crop may be sown in the same rows where the first are pulled.

An acre sowed as early as possible for a summer supply as above, and the last for winter, pulled by the 25th of July in time to sow with turnips and bromus, will be one of the most profitable acres of the farm; giving two root crops in one season, and one early cut of bromus for green feed, the following June; or for hay or for seed, the bromus having a sprinkling of urine and water, after mowing, will give three cuts in the summer. As ever, yours truly,

Lancaster, March 14. BENJAMIN WILLARD.

For the New England Farmer.

SUCCESSFUL BUTTER-MAKING.

MR. BROWN:—I send you answers returned, to the queries on dairy management contained in my note to Mr. Rogers, published in your paper of the last month.

1st. "The measure used was *beer measure.*"

2d. "The *feed at the time* consisted of a peck of carrots to each cow, morning and evening, with sufficient good English and salt hay, and *nothing else.*"

3d. "The milk was set for *one week*, churning every Friday."

4th. "The pans used were of tin—6 in number—15½ inches in diameter, into each of which was put one gallon of milk."

5th. "Crowell's patent churn, No. 2, was used."

6th. "Care was taken to prevent the milk freezing, when in the pans."

These are small items, but as the business of life is made up of items of this character, I thought they might be interesting to those who regard the experiment as worthy of notice. Especially at this time, when the State Society have wisely determined to apply their means so liberally, to the encouragement of dairy management. I know not anything they could have done better. It is most creditable to the gentlemen who proposed it, and equally so to those who so promptly adopted it. If each claimant shall be required to return distinct answers, to such pertinent inquiries as should be appended to the offers of premiums, a mass of information will be elicited, of value far greater than the amount offered. I feel confident, when the time comes, for the dairymaids of Essex, to put in their claims, there will be many claimants. Our farmers are not fond of driving their *good cows*, many miles to a show; but their wives and daughters are pleased with an opportunity to show what they have done at home. In this way alone, may it be determined, what may be expected of good stock, through the season. If the State Society will continue to co-operate with *County Societies*, where most needed; and we shall not so subdivide these *County Societies*, as to weaken their influence; it seems to me, our organization for improvement, will be as complete, as circumstances admit. It will not be long before some system of instructing the farmer shall be developed, worthy of Massachusetts.

Very truly yours, J. W. PROCTOR.

Danvers, March 13, 1854.

For the New England Farmer.

ONIONS AND CARROTS.

MR. BROWN:—Dear Sir,—will you be so kind as to inform me how onions and carrots are raised together, on the same ground—when each is to be sown—in what manner—on what kind of soil, and how many seed to the acre! (*a.*) Onions and carrots are raised extensively in Bristol, from whence we get our supply.

I have land lying on the river which produces grass much better than our common meadow, but the quantity somewhat less from year to year. I am satisfied the land ought to be plowed and manured; and I should be very glad if you would tell me what course to pursue. I do not want to plant it, as it is overflowed when freshets occur; and as these oftener occur in winter than summer, would not spring be the best time for plowing and seeding! (*b.*) Would ashes, leached or unleached, alone do for manure? The land is firm, and may be plowed at any season after the frost is out.

If ashes will do for this land, how many per acre? A SUBSCRIBER.

Taunton, 1854.

REMARKS.—(*a.*) We have seen onions and carrots cultivated together, but do not think it the best way to cultivate either crop.

(*b.*) Perhaps the best way would be to seed down your land in spring upon a crop of barley; this does not choke the young grass plants as oats will. But if you lay it down early in August, we do not think it would injure the grass even if it were flooded a few weeks in winter.

FACTS IN HUMAN LIFE.

The number of languages spoken in the world amounts to 8064—587 in Europe, 896 in Asia, 276 in Africa, and 1264 in America. The inhabitants of the globe profess more than 1000 different religions. The number of men is about equal to the number of women. The average of human life is about 28 years. One-quarter die previous to the age of seven years; one-half before reaching 17; and those who pass this age enjoy a facility refused to one-half the human species. To every 1000 persons only one reaches 100 years of life; to every 100 only 6 reach the age of 65; and not more than one in 500 lives to eighty years of age. There are on earth 1,000,000,000 inhabitants; and of these 333,333,333 die every year; 91,334 every day; 3780 every hour, and 60 every minute, or 1 every second. These losses are about balanced by an equal number of births. The married are longer lived than the single, and above all those who observe a sober and industrious conduct. Tall men live longer than short ones. Women have more chances of life in their favor, previous to being fifty years of age, than men have, but fewer afterwards. The number of marriages is in proportion of 75 to every 1000 individuals. Marriages are more frequent after the equinoxes; that is during the months of June and December. Those born in the spring are generally more robust than others. Births and deaths are more frequent by night than by day. The number of men capable of bearing arms is calculated at one-fourth of the population.—*English Quarterly.*

ELEVENTH AGRICULTURAL MEETING,

At the State House, Tuesday Evening, March 28, 1854.

Subject,—*Sheep—can they be advantageously kept on our farms? If so, what are the best kinds for this purpose?*

The meeting was called to order by Mr. Sprague, of Duxbury, and Mr. Harvey Dodge, of Sutton, was called on to preside.

Mr. Howard, of the *Cultivator*, was called on by the Chairman to open the discussion. Mr. Howard said he considered the matter of keeping sheep one of the most important subjects which had been discussed here this winter. We keep live stock in this section of the country as a matter of necessity, as a general thing in order to procure our milk, butter, cheese, &c.; but if stock is to be kept to turn off from our farms in the shape of meat, there are some sections where sheep can be made more profitable than any other live stock, for this reason—they can live where other animals cannot; they can live on poor soil, of which we have large quantities. On such lands mutton can be made cheaper than beef. Our situation is approximating continually to that of the old countries in Europe, our population is increasing in numbers and density, and it is an important question how it can be fed. In England, the best mode of accomplishing this object absorbs the attention of the farmers, and they keep a great number of sheep. Mutton is eaten there in large quantities; and it is eaten more in this country than formerly. Therefore the object with us in Massachusetts, is rather to raise mutton than wool. As to varieties, it is uncertain which is most profitable, but considering the great demand for meat, some of the English mutton breeds would be more profitable than the Spanish breeds. Of the English varieties, the Leicester, South Down and Cottswold are the best. The Leicesters have demonstrated a very important point—the production of a well-defined and established breed, by crossing, and they improve every other long-haired breed in England or Europe. The Cottswold are derived from the Leicester, are larger than the latter, have more and longer wool, and have a hardy nature, but are longer in arriving at maturity, and have more lean than fat meat. The South Downs, as they exist in this country, are a somewhat artificial animal. They are a close wool sheep, of comparatively small size, active, will graze on short pastures where larger animals would hardly live, and are remarkable for the richness of their meat. There is an improved South Down breed, which does not mature quite so early as the Leicester—perhaps it is a year longer in maturing. In the English markets it brings two cents a pound more than any other kind of mutton. In time it may be made as profitable here. It is not so active as the old South Down, and perhaps the quality of the meat has deteriorated a little, still, it is far superior to any other kind of sheep. The Spanish sheep, as a variety for wool, are unquestionably the most profitable we have any account of in the world. When properly bred, they become as hardy as native sheep. They are not so good mutton sheep, either in quality or in tendency to fatten, as the other varieties mentioned; but there is no sheep that will produce so many pounds of wool in proportion to the weight of the carcass, as the Spanish Merino. It is an original breed, and there is good reason to believe that it is the same variety which was fostered by the agriculturists of Rome. Within the last hundred years several branch breeds have sprung from it. First, the Saxony, which has a very fine wool. Another is the French Merino, a mixture of three or four Spanish varieties, but very uncertain in its progeny. A handsome, compact ewe will perhaps turn out a lamb, the very opposite of what is desired. They have been introduced into this country as a matter of speculation, which has turned out very profitably for the speculators, but whether to the benefit of the farmer, is another question. The speaker was not cognizant of any systematic experiments with this breed, but has been informed by a person who had compared them with the old Spanish stock, that they were less profitable. Another variey is called the Silesian, which is larger in size than the best Merinos of Vermont, but of remarkable symmetry and beauty, with the thickest and evenest fleeces, second only in quality to the Saxony. It is said they turn off the largest amount of wool in proportion to the carcass, of any variety. They are worthy of further trial. We see in all this, the necessity of experiment in regard to breeds, in order to give the farmer accurate knowledge in regard to the best varieties for his use.

Mr. Flint, Secretary of the Board of Agriculture mentioned a variety called the Oxfordshire Downs, produced by judicious crossing, by an English gentleman. The cross is Leicester and Cottswold. They are of very handsome form, and promise to become a valuable variety. Wool, he further remarked, can be raised cheaper at the West, where the flocks have vast prairies to roam over, than it can here, and our farmers cannot compete on this article, while in raising mutton for the market we have the advantage. Therefore it is now the object to raise the latter. For this purpose the South Down and crosses are probably the best.

Col. Newell, of Essex, said he had seen some of the Oxfordshire Downs, which were in the possession of Mr. Fay, of Lynn. They are very superior sheep, and Mr. Fay, considers them preferable to any other variety. They are a cross of the Leicester and South Downs. The speaker said

there were some full blood South Downs in his neighborhood which were certainly very good sheep, large, and wool of very good quality, and they raise up a great many lambs. The Leicesters come to maturity earlier than any other sheep, but whether they are the best sheep for us, is doubtful. They are not so good for wool, and the lambs the first year are worth but very little.

The Chairman mentioned the manner of feeding sheep pursued by Mr. LAWTON, Great Barrington, in the western part of the State. He keeps 800 sheep, and feeds them one quart of corn each, per day, and all at one time.

Mr. RUSSELL, of Pittsfield, said he had noticed that the half blood Merinos did not produce so large lambs as the full bloods, but they were very fat—fatter than any other he knew of. He was firmly of the opinion that a cross of the French Merino with the South Down, would produce a most profitable variety. He saw a lot of about thirty full blood French Merinos on the Hudson river last fall, which were fine sheep, and would probably weigh 140 lbs. each, per live carcass. They were not fine wooled generally, but he picked out six or eight from the lot which had very fine wool. The wool on any of them was fine enough for de laines. He thought a cross of them with the South Downs or "old-fashioned" or native stock, would be successful, but should give the preference to the "old-fashioned" on one or two accounts; one is that their lambs mature quicker. He also spoke very favorably of the Silesians, as yielding a long, fine and compact fleece, and possessing a very handsome form. A year old sheep of half blood French Merinos, shorn at Hinsdale, last year, yielded 4 lbs., 13 ounces of wool, which sold for 60 cents per lb. The animal weighed only 44 lbs.

The Chairman said he thought we must use turnips as feed for sheep.

Mr. HOWARD said he understood there were epicures in this city who would not eat anything but Plymouth County mutton, because, they said, Daniel Webster was the greastest epicure in this country, and imported pure South Down sheep, whose blood has been disseminated in Plymouth county, and they must have good mutton in that county. He desired to hear from Mr. SPRAGUE on this point.

Mr. SPRAGUE said he knew very little about sheep, although he knew Mr. WEBSTER had sheep which were worth seven or eight dollars. He then went on to remark concerning sheep in Great Britain. There sheep have more muscle than here, and a better admixture of fat and lean flesh. Sheep intended for the table should not have too much fat. Mutton is growing more popular in this country. The great difficulty in raising it here is our hot sun. In England the climate is moist. Farmers in this country have paid little attention to the raising of mutton, but it is important that they should.

Mr. RUSSELL remarked that considerable had been said in regard to the quality of the meat of fine wool sheep,—that it was not so good as the coarse wool varieties; but he thought this opinion would be found erroneous on investigation. The South Down approximates to a fine wool sheep.

Mr. COPELAND, of Roxbury, thought the value of different kinds of feed for farm animals, should be studied more, and should be made statistical. It is said on good authority that 90 lbs. of turnips will make 1 lb. of beef, and 8¾ lbs. of corn will make the same amount. Prof. NASH had said that the reason why English mutton was less rank than our, might be the fact that English mutton is fed on turnips. In regard to the matter of buying animals at a certain age to fatten, instead of raising them, he thought it the more profitable plan, because after the bone and muscle are formed, the cost of fattening is much lessened, and a larger profit is made on an animal after this period than before. In England it has been found (although the matter is not definitely settled) that cattle, after a certain age, fatten first inside, and then outwardly.

Mr. HOWARD said he did not think that the connection between feed on turnips and good mutton, could be established, for the best mutton in the English markets is grown on the hills and heathers, and is never fed with turnips. The difference is not the result of climate on feed, but in the germ or breed.

Mr. RUSSELL said he considered himself a good judge of mutton, and thought the matter was not treated properly. Mutton should not be eaten until it is a fortnight old, when it is exceedingly tender and palatable. This system is pursued in England.

The Chairmam expressed his concurrence in this view of the matter. He also alluded to the want of some rule for raising animals. We can tell by the eye what is a good animal, but we do not know how exactly to produce another like it. He believed that hybrids from the French merino were going to be of great benefit to this country.

Mr. RUSSELL offered some remarks in relation to offering premiums for fine animals He thought the most judicious plan would be for the agricultural societes to award premiums for *several* animals to be raised by one person, because the selection of a single remakable animal for premium had no tendency to improve breeds of stock.

The Chairman inquired of Col. NEWELL whether sheep would eat wax-wood?

Mr. NEWELL replied that they would eat it and thrive on it. A gentleman of his acquaintance had puchased a flock for the very purpose of eradicating it from his farm, and was successful. He had no doubt that the quality of mutton was improved by feeding roots. Sheep fatten full as well, and the mutton is better than when fed on

corn. He considered it a question whether it was not a good plan to keep an equal number of sheep pasture with cows. They destroy weeds and bushes which the cows would leave, and thus increase the amount of feed in a pasture, besides feeding closer than cows. Many of the farmers in Essex county are convinced that it is a good plan.

Mr. SPRAGUE said he owned a pasture, where ten or fifteen years ago, before he bought it, sheep and cows were fed, and although he had fed less stock there, and no sheep, the pasture was not so good now as then. He also spoke of the necessity of having pure blood in breeding cattle or sheep; there is no certainty with half blood. It is said that we must not breed in and in, but gentlemen in England have done it for 75 years without bad effect.

The Chairman was of opinion that we might "breed in and in" to a certain extent, but beyond that it would be very injurious, as in the case of the Suffolk hog.

Mr. FLINT read from his report the opinion of the Berkshire farmers in regard to feeding sheep in the same pasture with cows, which was decidedly averse to the practice. They run over the pasture to get the finest feed, thus destroying the coarse feed for the cows; and being a strong-scented animal, no cattle will feed where they huddle.

Mr. RUSSELL said he had observed that his sheep ate the whiteweed in his pasture, one season, on being removed to it from another locality.

Col. NEWELL said it had got to be very common in Essex county to employ sheep to eradicate "ox-eye" from the farms. Col. EMERSON, a large farmer there, said he had no doubt that they will do more than anything else to accomplish the purpose. He procured them for this very object.

The subject for next Tuesday evening is—*Grain Crops*—wheat, rye, barley and oats—their value as compared with Indian corn, and as preparatives for grass.

For the New England Farmer.

PREPARE YOUR GROUND FOR THE MOWER.

In five months, haying will be upon us. Shall we break our backs over the scythe? or shall we wake up to the times in which we live, hang these already well worn instruments on the "tree" and with our horses shave over our fields with ease and rapidity?

Whichever of these instruments we choose, let us do one thing as soon as the spring opens; clear every stick, chip and stone from our fields, and roll them while soft.

Whether we use the scythe or mower this labor will be well expended. If you have no idea of procuring the machine, your good-natured neighbor may take pity upon you and mow your grass with his mower after he shall have done a month's haying in ten days.

Don't neglect uneven fields, for these machines will mow on quite uneven surfaces.

The day is at hand when the scythe over which we have so long groaned is to be laid aside, and the faithful horses must be called from the shade to cut our grass, and the man who persists in mowing by hand will be gazed at as a relic of the past, like a plow of the last century, a fit subject for Barnum's Museum.

This to some may look extravagant, but will not five years hence. Show me the man who for economy's sake will ride his own horse from Boston to New York—that will weave his cotton cloth by hand—that will split his own lumber with an axe, while a saw-mill is running at his side, and I will admit that there is one man who may continue deaf to the chipper of the mower as it glides under the grass of the meadows.

"Ketchum's" is doubtless the best mowing machine yet made. The *Country Gentleman* and the *Scientific American* support me in this opinion.

The machine is simple in construction having had some *most valuable improvements* made upon it since last year and is durable if properly used. Messrs. Ruggles, Nourse, Mason & Co., of Boston and Worcester, are making them and from the specimens of improvement which they have given us, I think it safe to look for a good machine.

DAVID LYMAN.

Middletown, Conn., Feb. 4, 1854.

For the New England Farmer.

BARN STABLES.

MR. BROWN:—By the request of one of the publishers of the *Farmer*, I send you a short article upon *Barn Stables*. He tells me that frequent inquires are being made at the office by those about building.

I should choose to have the *leanto* on the North side of the barn, for these reasons. If the barn is tight, the leanto will be warm enough in winter, and by being on the North side, it will be comfortably cool in summer. Cows in this vicinity are "tied up" every night the year round, with certain exceptions. It is well, therefore, in building to think of the heat of summer as well as of the cold of winter. Then if the leanto is on the North side, the droppings are farthest from the sun and air. This arrangement, too, allows the opening of the cellar—which is very desirable—to be upon the South side.

With a few exceptions, the good barns in Concord are furnished with stanchion fastenings for all the cattle beside working oxen. No one doubts but that an animal is a little more comfortable tied with a chain than by stanchions. He would enjoy it to have the length of the stable! But with animals as with men, society imposes some restraints to compensate for some advantages! No respectable cow within my knowledge complains of the stanchions, if the good, sweet fodder is only "brought on."

With working oxen, the case is a little different. They are larger, and more gentle and easily managed. Their limbs are stiffer, and they require more space to lie down in. Their necks are weary with the heavy yoke, and need the relief of turning from side to side. Therefore, working oxen should be tied with chains.

But there is another reason: Working oxen in

the short days of winter are not unyoked at noon. Now if the entrance to the stable is by a wide rolling door, and no stanchions in the way at the stall, your team may be eating at once in a comfortable place, and they will not waste the hay by trampling it into the snow or mud.

Stanchions are just the thing for turbulent young cattle. A little hay soon coaxes them to put their heads through, and if you chose, you may connect the moveable stanchions together, as I have before represented in the *Farmer*, and fasten the whole row by a single latch. This is a great saving of time and of very disagreeable labor when the cattle come in dripping wet.

Stanchions save room. The cattle, tied in them, eat from the side of the barn-floor. Then, too, any orts or leavings, are expeditiously gathered with a rake, or the floor swept with a broom. Where cattle are tied in stanchions the labor of feeding is trifling. A forkful of hay may be shaken along before them as a man walks. The stanchion should be three inches wide and one and a half inches thick, of hard wood. The width apart of the pieces when set depends a little upon the neck of the animal. The distance usually is about eight inches. It is well to have one or two extra pin-holes in the lower timber. The stanchions may be set a little farther apart at the bottom than at the top. The animal tries to escape when standing. The space between the stanchions of each animal should be filled with a strong plank. This precaution would have saved one valuable animal in town this winter, and is necessary to save hay. Now what shall be the plan of the floor? For cows it should have a very gentle inclination, and be just four feet four inches long. Where the standing floor has varied from this in the best barn in Concord, it has been altered. Mr. Joseph George, of this town, a very careful carpenter, tells me the milkmen agree that a floor four feet and four inches in length is the best. Cows tied upon it keep clean and dry. I saw a few days since some cows in the well arranged and attractive barn of Mr. John Raynolds, as dry and clean as if under an oak upon the green sward.

The standing floor for steers and oxen should vary a little in length as well as pitch from that for cows, for obvious reasons. (*a.*)

At the lower end of the standing floor, behind the animal, there should be a *trench* twelve or fourteen inches wide, and five inches deep. This trench is indispensable to the animal's cleanliness and comfort. It receives and holds all the droppings in a small space, and the labor of "cleaning out" the stable is very much less than by the old arrangement

The scuttles should shut upon the bottom side of the trench in such a manner as to allow of a ready escape of all liquids. The scuttles should be upon substantial hinges, and turn over upon a platform, or walk, behind the cattle, of convenient width.

There is one comfort about modern barns which is worth a great deal more than it costs. I mean *light*—the introduction of a plenty of good sized movable windows. Cattle enjoy light. It certainly is desirable to have it to work by, yet how many barns now depend upon the frequency of the cracks for its abundance! or open the "great doors," of a sharp morning, to see how to feed the cattle. It is important, no doubt, to ventilate a stable well, but still, very desirable to have control over the apertures.

A good barn is worth more to a farmer than a showy house. The house may impoverish him, but the barn will aid him directly in securing a competency or fortune; which lot, I hope, in conclusion, is to be a part, only, of the pleasant experience of your readers. W. D. B.

Concord, Mass., March 4, 1854.

REMARKS.—(*a.*) In order to shorten or lengthen the floor upon which the cattle stand, the planks may be left loose, and under the fore-feet of the cattle a plank inserted of any desired width, so that the floor may be lengthened or decreased to any desired length, with a few minutes' labor.

THE WEATHER AND THE CROPS.—In regard to the condition of growing wheat, there is a good deal of speculation. Accounts from Ohio vary; some papers say that the prospects are very bad, and that the farmers talk of plowing up their fields; others, that the wheat throughout Ohio bids fair to be as good as usual. An account from Michigan says that wheat is generally good, and looks promising. At Nashville, Ill., the season is said to be unusually early, and the prospects favorable; a much larger breadth of spring wheat has been sown than ever before. In Lake county, Iowa, it is said that so favorable a spring was never known.

At St. Louis, on the 29 ult., there was a severe frost, and a day or two previous a light fall of snow. The same weather had been experienced at Keokuk, Peoria, and other places, and fears were entertained in regard to fruit. The *Jackson* (*O.*) *Standard*, of 30th ult., says that frosts have destroyed entirely the fruit in that section. Of peaches, the *Middletown* (Conn.) *Herald* of 31st, has the following:

Are the Peaches Killed? This seems to be a question on the lips of almost every one. The cold March weather for some days past has awakened this solicitude about this excellent and delicious fruit. The general opinion with good judges so far, we believe, is that unless there should be a still harder *freeze* than we have had of late there will yet be a fair crop of peaches. Should so much good fortune as this befal us we may rest assured that there will also be an abundance of other fruit. Plenty of peaches always bring plenty of other fruit.

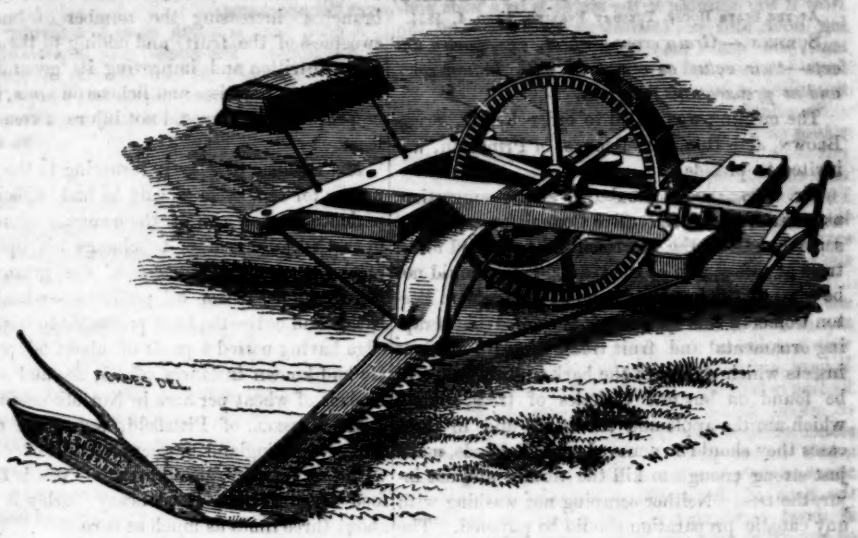
South Carolina and Georgia papers, of the last week in March, speak of heavy frosts, and fear that much injury will be done to fruit.—*Boston Journal.*

HAMPSHIRE FRANKLIN AND HAMPDEN AGRICULTURAL SOCIETY.—Officers for 1854.

PAOLI LATHROP, President.

WM. O. GORHAM, Secretary.

BENJ. BARRETT, Treasurer.



KETCHUM'S MOWING MACHINE.

The accompanying cut, which we copy from Messrs. RUGGLES, NOURSE, MASON & Co.'s catalogue, represents Ketchum's Mowing Machine, which is considered a thoroughly successful machine, for the purpose of cutting grass, and the only one that has cut all kinds of grass, heavy or light, wet or dry, lodged or standing, in the best manner, without clogging or interruption.

It has taken six first premiums the past season (1853.)

We annex the following testimonials, which are the more valuable from the fact that they are extracts from business letters:—

TESTIMONIALS.

HOWARD Co., Buffalo:—I am better pleased with the Machine, the more I use it; I doubt not it will beat the world. I am surprised to find it requires no more power; my two horses don't worry at all; the speed required is just right; in short it works to a charm. I think the Machine will probably be worth sixty dollars, or from that to one hundred and twenty dollars, to me, this season. DAVID LYMAN.

Durham, Conn., July 5th, 1853.

MESSRS. RUGGLES, NOURSE, MASON & Co.:—Gentlemen—You ask me to state to you my opinion of *Ketchum's Mowing Machine*. I bought one of you last spring and used it on my farm, which is level land and free of stone, during the last summer.

Its operation was viewed by many practical farmers in my vicinity, and every one expressed the highest degree of satisfaction and approbation of its work. I requested my head farmer, Samuel I. Pickering, a man well known and of approved knowledge in farming, to give me his opinion of the instrument. His reply was, "I think it one of the best machines I ever knew—with two horses I can mow *one acre* of *grass* in *forty minutes*, the surface being smooth and *three tons* of hay to the acre, and with two first rate horses, *twelve* acres might be mowed in a day, working twelve hours for the day. In the single operation of *grinding and whetting scythes*, it will save a large farm, *twenty dollars in one year*, as wages were last year. As to spreading grass, no man in the world can spread grass, as it is left by this machine!" Such is the reply of my farmer, and from my own observation, I concur in the truth of this statement.

Yours, respectfully, JOSIAH QUINCY.

Boston, Feb. 26th, 1854.

HOWARD & Co.—My Machine (one of your improved make) has cut two hundred acres of grass, and all is right yet, except I have broken out one cutting tooth; it is not injured one dollar by using; it cut nineteen acres in thirteen hours, that would average two and a half tons to the acre, with a team not as heavy as my sorrel horses, on the 22d day of July, which was the hottest day I think we have had here this summer. It is decidedly the best Mowing Machine ever known in Ontario County. * * There has been a perfect rush from different parts of this county and Cayuga county, to see my Premium Machine, as I style it. * * * I sold it, after cutting two hundred acres, to Mr. WATERMAN, for one hundred and twenty dollars. He would have given one hundred and fifty dollars for it, had I asked it. A. C. LOOMIS.

Geneva, July 23d, 1853.

I send you two dollars for knives for your Mower. You will be able to sell from twenty-five to thirty Machines here next season. I go round mowing; there has not been a day since I commenced mowing but I have had from five to ten persons after me to mow. I have mowed in four towns; I average from ten to sixteen acres per day; I have mowed nine acres in one afternoon.

D. W. SCHOONMAKER.

Waterloo, Seneca Co., July 7th, 1853.

TWELFTH AGRICULTURAL MEETING,

AT THE STATE HOUSE, TUESDAY EVENING, APRIL 4, 1854.

SUBJECT,— *Grain crops—wheat, rye, barley and oats—their value as compared with Indian corn, and as preparations for grass.*

The meeting was called to order by Mr. SIMON BROWN, and Hon. Mr. BROOKS, of Princeton, was invited to preside.

Mr. COPELAND, of Roxbury, at the suggestion, as he said, of the Executive Committee, spoke at some length on the treatment of fruit and forest trees at this season of the year. Trees should not be scraped, as has been done to the trees on Boston Common this spring. It is argued that scraping ornamental and fruit trees, destroys noxious insects which cluster in the bark; but insects will be found on but few varieties of trees, among which are the apple and the pear, and in these cases they should be removed with soap suds, made just strong enough to kill the vermin and not injure the tree. Neither scraping nor washing with any caustic preparation should be pursued. The insects most injurious to trees, as the borer and *trimbex colomba*, go *through* the bark into the wood, and of course neither scraping the tree nor washing it with caustics will reach the evil.—Scraping is an unnatural process, and besides a very disfiguring one, greatly impairing the beauty of the tree. Another objection is that by removing the outer bark, the inner bark is exposed, and evaporation ensues, which is sure to sap the life of the tree. In cases where old orchards have been reclaimed, the trees being scraped, it is owing to the cultivation, the manuring, &c., and not to the scraping that the revivification is to be assigned; the trees would have recovered without the scraping.

Mr. BUCKMINSTER, of the *Plowman*, controverted Mr. COPELAND's views in regard to washing trees. He was decidedly in favor of caustic washing on some kinds of fruit trees, especially apple. There is nothing like caustic ley for destroying all moss, parasites, &c., on trees, and he could recommend no better treatment.

Mr. BROOKS, the chairman, mentioned the case of a gentleman who was greatly troubled by the apples dropping from his trees. To remedy the evil, he adopted the expedient of stripping the trees of their bark between the 10th and 20th of June, and the most successful results followed, the apples remaining on the trees, and a new bark growing in one season.

Rev. Mr. SANGER, of Dover, inquired of Mr. COPELAND if he considered trimming trees injurious?

Mr. COPELAND said he did not. In regard to the case cited by the chairman, the explanation is this. The sap which runs up a tree comes down in the bark, and if that bark is removed from the trunk of the tree, the sap will go no further than the edge of the bark, and flow back into the branches, increasing the number of buds, the sweetness of the fruit, and adding to the amount of its nutrition and improving its general qualities. As to parasites and lichens on trees, it could be proved that they did not injure a tree in the least.

Mr. SANGER, of Dover, recurring to the subject proper for the evening, said he had sufficient experience as chairman of the committee on grains in the Norfolk Society, to change his opinion in regard to the profitableness of the grain crops. He considered them all profitable—wheat, rye, barley and oats—the least profitable to his knowledge having netted a profit of about 50 per cent. He had known instances of 25, 28 and even 30 bushels of wheat per acre in Norfolk county.

Mr. RUSSELL, of Pittsfield, was of the opinion that New England farmers could not compete with the West in raising grain. Corn is the best food for animals. Good heavy barley is worth about three times as much as corn.

Mr. FISKE, of Framingham, did not think that small grains could be raised in Massachusetts, without very high manuring, but corn can be raised almost anywhere. The great enemy to corn, the drought, he avoided by deep plowing. On a piece of poor land where corn had failed for two years, he plowed thoroughly the third year, used no manure, but put a shovel-full of mud into each hill. In plowing among his corn, he plowed two furrows, turning from the corn. This he followed with a harrow with fine teeth which he permitted to run through the hills, as it did not destroy corn enough to do any injury. When the hot season came on, and his neighbors' corn, on land better manured, was rolling up, not a leaf in this lot was curled, and the ground was moist from the surface to the depth of four feet. He obtained 40 bushels per acre, from it. He believed that we needed not to look to the West for grain. Mr. FISKE entirely disapproved of the use of cultivators, as they merely scratch the surface, and are "old fogy" implements, altogether.

Mr. BROWN, of the *Farmer*, said the cultivation of winter wheat was being introduced in New England of late years, and had proved quite successful, particularly the blue stem variety, which is said to make the finest of flour. He believed that the corn crop was the best that could be raised. It can be grown for 50 cents per bushel, and almost any one could raise it at a cost not exceeding 75 cents per bushel. To raise the comparative value of grain crops, he recommended the drill system of cultivation pursued in England, by which the profits can be largely increased, by an enhanced yield, and a saving of one-third in the amount of seed sown. The machine for drilling carries and plants the seed at the same time, dropping it in a straight line, and all at the same

depth, while if sown broadcast, some of it will be half an inch and some an inch below the surface, producing an uneven and diminished growth, and wasting much seed—equal to one third. Oats are generally used in laying down land for grass, but he thought barley was better, and still further, that both were unnecessary. Plant corn on a flat surface, instead of hilling it up, after the English fashion. English farmers are obliged to hill their corn on account of the moisture of their climate, which hilling is designed to obviate by causing the moisture to settle away from the corn. Our climate is dry and hot, and therefore this system should not be pursued, but the corn planted on a flat surface. To lay down such land to grass, sow the seed after the last hoeing, and work it in with a hand-rake. He had succeeded as well in laying down land in this way as any other.

Mr. SANGER sustained the views of Mr. FISKE of Framingham in regard to deep plowing for corn. He also requested Mr. COPELAND to explain the best method of trimming trees.

Mr. COPELAND explained the causes of increased moisture in deep plowing, which is owing to the plowed land reflecting more heat than unplowed land, and therefore contributing more for condensation and fall when the sun is declining of the moisture which always exists in the atmosphere, even in the hottest weather. The capillary attraction of the earth is also more efficient, and moisture is circulated both from above and below with greater facility. As to trimming trees; he was averse to much trimming, but would cut from the ends of the limbs rather than from inner branches, unless limbs crossed. To cut away the dead wood and crossed branches, he thought sufficient.

Mr. SPRAGUE, of Duxbury, expressed the conviction that each farmer must raise crops according to the circumstances in which he is placed, and decide for himself which is more profitable. He also contended that farming was comparatively a very unprofitable calling, at least in Plymouth county.

Mr. FISKE, of Framingham, denied the unprofitableness of farming, and cited his town as proof to the contrary.

The CHAIRMAN also argued the profits of farming, and went into an interesting comparative statement to show that New England can compete with the West in raising corn. He advised farmers to consume all their produce on their farms, and secure their money returns on beef, butter, milk, &c,—because every bushel of grain going from a farm takes with it the means of raising another.

Mr. RUSSEL, of Pittsfield, controverted the idea of competing with the West in the article of corn, alleging that they have much the advantage in the matter of labor.

After a few remarks appropriate to the closing meeting of the series, by Mr. BROWN, the meeting adjourned *sine die*.

STATE FARM AT WESTBOROUGH.

In June or July last we gave a brief account of the foundation of this Institution of charity, of the location and capabilities of the farm, and that it was then contemplated by the Board of Trustees to place the farm under the care of the State Board of Agriculture. This transfer was made on the 24th of March, 1854. In the instrument of transfer it is declared that "the purpose of this arrangement is, to relieve the Trustees of the care and management of the agricultural portion of the establishment at Westborough, to provide an experimental farm to the Board of Agriculture, and to furnish greater facilities for the employment and instruction of the inmates of the Reform School in Agriculture and Horticulture, in accordance with what are believed to have been the views and wishes of General THEODORE LYMAN, the founder of the Institution, while the products of the farm shall continue to be applied for the use of the school substantially as under the former management."

The prime object of the founder was the reformation and well-being of the boys, and that object will still animate both Boards, under the new arrangement. But the extent of the farm, and its adaptation to the various crops, with the great advantage of a market without stepping off the land, offer facilities for a more extended cultivation, and more exact experiments with stock, manures, trees, plants, draining, irrigation, subsoiling and reclaiming, than the Trustees could find opportunity to attend to, after discharging their duties in relation to the school itself.

With the Institution, that is, the school for the reformation of the boys, the Board of Agriculture has nothing to do, more than to find employment for as many boys as the Superintendent can spare, and to place them under such influences and instruction as will increase their skill in agriculture and horticulture, while it affords them healthful occupation in the open air. It is supposed that the amount of labor thus supplied may amount, in the course of the present year, to the sum of four or five thousand dollars.

Some portions of the farm are exceedingly rocky, and will require an outlay of from fifty to two hundred dollars an acre, to clear them out. This is the case with some of the land directly in front of the principal buildings, which must be thoroughly reclaimed before any well defined plan of the estate can be completed. The division fences remain much as they were when the tract was purchased, and little has yet been done in the way of draining, or bringing the fields into a high state of cultivation. With regard to landscape gardening and rural architecture, nothing has been attempted; and so far are we from any disposition to find fault with this, that we think the Trustees have shown a wise forethought in declining to take up a work

so widely different from that with which they were charged. Their duties have been to perfect the plan for the reformation of juvenile offenders, and not to make an exhibition of their skill in laying out parks and pleasure grounds. By the exercise of good sense and a refined taste, the estate may, however, become one of the most beautiful in the Commonwealth; and under the judicious management of the Board of Agriculture, we hope to see it, from year to year, gradually assuming the beauties and principles of the art of landscape gardening, in order to please the eye, as well as to produce beeves and milk and corn, to sustain the corporeal powers. Though the fields be well cultivated and nodding with ripening crops of corn and grain, and the earth bursting with the rich treasures of her root harvest, we wish to see spots where the smooth lawn shall extend to the lake shore, or the lover of seclusion may say—

"Here Nature in her unaffected dress,
Plaited with valleys and imbost with hills,
Enchast with silver streams, and fringed with woods,
Sits lovely."

With the strong working force of men and teams which such a farm requires, there will be frequently a day when both may be applied to such work as is not absolutely necessary to the production of the greatest crops, but may be applied to grading, embanking, road-making, &c., which will effect wonderful changes on the farm in the course of a few years, and without the necessity of a specific appropriation for such purposes. We do not, therefore, think it "travelling out of the record," as the lawyers say, to suggest to the Board the importance of immediately obtaining such a survey of the whole, and such a plan or laying out of the grounds as the combined wisdom of the two Boards, together with such artistic aid as they may call in, will suggest—so that every valley filled, or hillock levelled, every pathway to cultivated fields, every rock removed, or tree or shrub planted, shall be so much done towards completing the plan adopted. From a personal knowledge of most of the gentlemen composing the Board, we have no doubt they possess the skill to manage the farm pleasantly and profitably, and at the same time settle many important questions in agricultural operations which are now involved in mystery, and in which our readers, everywhere, are interested.

The World a Tribunal.—A man passes for what he is worth. Very idle is all curiosity concerning other people's estimate of us, and all fear of remaining unknown is not less so. If a man knows that he can do anything, that he can do it better than any one else, he has a pledge of the acknowledgment of that fact by all persons. The world is full of judgment days; and into every assembly that a man enters, in every action he attempts, he is gauged and stamped. In every troop of boys that whoop and run in each yard and square, a new comer is as well and accurately weighed in the course of a few days, and stamped with his right number, as if he had undergone a formal trial of his strength, speed, and temper. A stranger comes from a distant school, with better dress, with trinkets in his pockets, with airs and pretensions. An older boy says to himself, "Its no use; we shall find him out to-morrow."—*Emerson.*

For the New England Farmer.

COMPOSTING LIME AND ASHES WITH MUCK.

Improved Cultivation, &c.

F. Holbrook, Esq.:—Dear Sir,—Having been long familiar with your articles on agricultural topics, I cannot but feel, in addressing you, in some measure, as if communicating with an old acquaintance.

You will perhaps think me unreasonable to trouble you with interrogatories, after reading your articles detailing your practice and experience so particularly.

But having learned thus much, makes me anxious to learn something more; and if you can spare a few moments to devote to my inquiries, you will much oblige me.

Having commenced farming in this place, in a small way, within the last year—and having an acre or two of muck swamp, I wish to make use of some of it with ashes or lime the coming spring. I have intended to use ashes; but am not sure I can obtain them in sufficient quantity; and should like to know whether your experience with lime continues to be as successful as you represent it to have been in former articles.

Mr. Mapes and Mr. Dana both recommend ashes to compost with muck, but seem to be rather shy of lime unless slacked with brine. Have you had any experience with Mr. Mapes' "Salt and lime mixture?" Which would you consider preferable on the whole—ashes at 14 cts. per bushel, or lime at the rate I can get it at from Boston?

Would you not prefer shell lime to stone lime? I see the shell lime advertised at Charlestown at 30 cts. per bbl.—about 3 bushels, I suppose. Would you use lime in preference to potash—in case ashes cannot be obtained?

I have written to Dr. Dana, but he said he had nothing to add to the directions in his "manual"—excepting that he had sometimes recommended the muck to be spread on the land, and then the ashes *sowed* on and both harrowed in together. How should you think that would do? It seems to me as if it must be better to mix the two and let them lie in compost for a while.

How long would you think it necessary to let the compost lie—(when applying either ashes or lime) before using? My muck was dug rather late in the fall.

My land is a rather thin soil; some parts rather stony (small cobbles;) other parts a gravelly loam; others inclining to sandy loam; is situated rather low, and pretty level;—and the original growth of timber probably, mostly pine,—with oak, chestnut, &c.

It has lain in pasture some years, and is pretty well *run out*. I think I shall try your method of turning over the sod in August or September, and seeding with grass.

Would you sow clover at that time, or sow

herds grass, &c., at that time and clover in the spring?

What variety of corn do you plant, or would you recommend,—8 or 12 rowed? Could you send me a few quarts, in case I should order it, of a good and productive kind? I planted the *Small Canada* last season, but it seems a pretty *small business*.

But lest I should weary your patience, I will close. Should you think of any other suggestions relative to muck, or any improved methods of cultivation, I shall be very thankful to receive them.

Very respectfully yours,

March 1, 1854. —— ——

Dear Sir :—I embrace my earliest leisure to reply to the inquiries proposed in your letter of the 1st inst. I often receive letters of inquiry about farming matters, which I answer cheerfully, notwithstanding the innovations upon my time involved in such answers, feeling willing to contribute my mite towards agricultural improvement. I have judged it proper to answer your letter through the medium of the *New England Farmer*, trusting that inasmuch as your inquiries are of similar import to those frequently proposed by other persons, and therefore possess general interest, and your name and residence are withheld from the public eye, you will not think the sanctity of private correspondence very seriously invaded.

You will realize good results from composting muck with lime alone; but if the lime is slaked with brine, the compost will be enough better to warrant the expense. Dissolve a bushel of salt in water enough to slake five or six bushels of fresh lime to a fine dry powder—slaking the lime no faster than wanted for immediate use, applying it to the muck while hot, and covering it at once with more muck. A cask, or three bushels of fresh lime will do very well for five loads of muck, of about one-half-cord each; but a bushel of lime to a load of muck would be better. It is an important point in composting, to mix the materials nicely; and hence the layers of muck and lime should be thin and frequent—say the muck four to six inches and the lime in the right proportion—so that the lime may act effectually in neutralizing acidity and promoting decomposition. After lying three or four weeks or longer, the heap should be thoroughly overhauled.

Good unleached ashes, at 14 cents per bushel, may in many localities be profitably composted with muck; but if you buy shell-lime at the price you named, and the freight is not too high, you may probably find it advisable to use lime instead of ashes, considering the relative cost of the two. If ashes are employed, about two bushels will be needed to each half-cord of muck. I cannot inform you of the relative advantage of using stone and shell-lime, as the former being plenty with me at a moderate price, I have not used the latter.

Whatever Doct. Dana says to you regarding composts, is entitled to great consideration. My impression is, however, that he would not advise you generally to broadcast the muck and ashes and mix them thus, in preference to mixing them in a heap to stand awhile before being applied to the land. By mixing them in layers to remain in heap a few weeks or months, the acidity of the muck will be fully neutralized by the alkali of the ashes, and the desirable decomposition carried forward.

You remark that your land is of a thin soil, and pretty much *run out*. Then you had better at once adopt measures to deepen the soil. In *skinning* your land, probably the plowing was quite shallow, and nothing below the depth of four to six inches was ever stirred. You had better begin plowing seven or eight inches deep certain, manuring well whatever you plow. Don't be afraid of a little yellow dirt. Deepen your plowing a little at the commencement of each new rotation of crops, allowing the original under soil to remain on the surface through that rotation, to be modified and improved by atmospheric action and the compost manure. To secure this result, let the first plowing for a given rotation be as deep as you wish to stir the land, and subsequent plowings, such as turning under the stubble of hoed crops preparatory to seeding to grass, quite shallow, leaving the turf underneath through the rotation. These remarks are meant to be general; you may of course find it convenient in practice to vary from them more or less; but, in general terms, they indicate a cheap and quick mode of improving a poor thin soil.

Such portion of the land as you would prefer to seed immediately to grass, without intervening hoed and grain crops, you had better plow in August or September, as you propose doing; spread your compost on the inverted furrows, harrow and mix it well with the subsoil turned up, and sow herds-grass and red-top seeds; on a late snow in spring, sow red and white clover seeds; and a few weeks later, on a still, misty day, sow a mixture of five to ten bushels of unleached ashes and one bushel of plaster to the acre, which will stimulate the young grass to push out roots vigorously and cover the surface of the land, and choke down sorrel, which is very apt to grow on such land as yours. Mow for three or four years, or as long as the crop of grass is satisfactory; then plow an inch or two deeper than before, and manure and seed as before. After two or three courses in this way, the land will be well filled with vegetable substance, and have that depth, body and consistence of soil which will protect the crops from ordinary drought and cause a good yield.

For pretty level lands of a medium texture of soil, and free from stumps, fast rocks and other considerable obtructions, you will find the Double or Sod and Sub-soil Plow an excellent instrument,—particularly in cobbly fields, as it hugs the ground famously and maintains great uniformity in depth of plowing.

In localities favorable to the growing and ripening of corn, it is generally best to plant a variety of good size of ear. I plant a very large sort of eight-rowed yellow corn, which ripens well on my warm flats, but would be too late for you. I have generally preferred large eight-rowed to large twelve-rowed corn, because the former has less cob to be cured than the latter, particularly at the but, and when several hundred bushels are to be cribbed up rapidly at husking-time, is not quite so liable to mould in bad weather. The little Canada corn, although of the very first quality for feeding purposes, does not yield largely at the best; and to obtain a large crop for this kind of corn, the hills must be planted very near together,

which increases the expense of cultivation; and then it requires the patience of Job to husk the crop. There is a variety of eight and ten rowed white corn, grown pretty generally in Plymouth County, Mass., which from all accounts I should think might do well on your thin soil. It is represented as yielding better on poor land than most other sorts of corn. It has quite a large ear, and small stalk in proportion to the ear. You can obtain it at the seed stores in Boston.

Very truly your friend,

F. Holbrook.

Brattleboro', Vt., March 14, 1854.

For the New England Farmer.

MONTHLY FARMER FOR MARCH.

A weekly agricultural journal in the newspaper style has advantages that do not belong to a monthly publication in book form. Not exclusively agricultural, the weekly is at once a map of the farm and a "map of busy life,"—a medley of big crops and big accidents; of scientific essays and practical suggestions; reports of hen conventions and speeches in Congress; prices of stock in Brighton and of stocks in State Street; advertisements of patent medicines and of patent manures. But the monthly, while it may lack something of this variety and freshness, has strong claims on the preference of reading farmers. It is compact and convenient for preservation and reference; without which an agricultural journal, or indeed any publication, is of little worth to me. A single perusal of an elaborate article, on any subject, embodying the results of much reading or of great experience, is of little value to most minds after the lapse of a few months. The facts become displaced, confused, forgotten; and in a practical use of them, the careless reader often finds himself in the dilemma of the good old lady, who, on giving directions for testing the genuineness of indigo, said, if put in water it would either sink or swim if good, but she had forgotten which! A working book for both farmers and mechanics should be of portable form, so that it may be consulted in field and shop. Such is the monthly *Farmer*. Bound up, it is an ornament to the library; and if any farmer can read the successive numbers without receiving a dollar's worth of profit, and a dollar's worth of pleasure, in the course of the year, he must be very near perfection, or something worse. But to the number before us.

AGRICULTURAL MEETINGS.

This number of the *Farmer* furnishes reports of three Legislative Agricultural Meetings, at which Plowing, Manures, Roots, and How to make Home Attractive, were severally discussed. Valuable and instructive as these debates have proved to be to the farmers not only of Massachusetts but of the whole country, a more hearty co-operation by those in General Court assembled, would give a greater freshness and originality to the proceedings of the society. Why don't they do it? Are farmers frightened away by the idea that remarks made here on saving manures, planting potatoes, feeding calves, &c. &c., will class them with public speakers, and orators? An article entitled "Legislative Agricultural Society" shows what these debates should be, while another, "Legislative Farmers," tells what they are. We find also a report of the discussion by the "Concord Farmer's Club" of Indian Corn; and "Agriculture South" gives some account of the agricultural association of the Planting or slave-holding States; while we are informed that among the principal points at which the "Maine State Board of Agriculture" aims is to introduce the study of agricultural science into every school of the State. When thirty-nine fortieths of the children of the farmers of the United States are able to attend no higher school than that of the district in which they live, how can they be reached by means of other and higher institutions?

"BIRDS OF NEW ENGLAND."

No. 9 of Mr. Fowler's articles give the life and character of the Blue-bird, the Bob-olink, and the Cat-bird.

BUTTER.

"Fine Samples of Butter" made from milk at the rate of four and one-quarter quarts to a pound. An inquiry, "Why don't the Butter Come?" well answered by "Butter Making."

CORN.

Besides the discussion of this crop by the "Concord Farmers Club," we have an article on "Corn, Cobs and Grinding" contending that, at the rate millers take toll, it is not profitable to have the cobs ground.

CROPS.

Comments on the "Weight and Measure of Corn," for premiums; account of raising "Wheat—forty-five bushels per acre," in Marlboro, N. H.; of a "Fine crop of Corn," in Epping, and of a great crop of sugar in New York, from a single tree.

"FEED FOR STOCK."

An account of the process adopted by the writer, for cutting and steaming the winter food for five cows, on which they "give as much milk as they would on good June feed," and a saving of "about one-fourth of my usual winter's feed," is made.

FRUIT.

Direction for the "Culture of Cranberry vines," and plain observations on "Cutting Scions," preserving and transporting them.

GARDEN.

The bright mornings and warm days that dawn on us here in March, are just enough to remind us that once more has the time of the singing of birds returned, and that spring-work will soon call us from the garden to the field. Let us read then what is said of "Garden Work," and how to raise crops of "Peas and Turnips" on the same land.

IMPLEMENTS.

Recommendation of "The Double Plow and Horse Hoe," by one who puts his own hand to the plow. Cut and description of "Batchelder's Corn Planter."

INSECTS.

"The Curculio"—a complaint that all remedies fail. "Bee Culture, No. 2." "Rose Bugs" kept off by ashes sprinkled on the leaves, and about the roots of rose bushes.

MANURES.

"Fertilizers"—suggestions for trials of carbonate of potash, aqua ammonia, sulphate of potash, and water in which vegetables are boiled, but no promise by the writer to make the experiments

himself! "Extracts and Replies" give the price, &c. of Poudrette, and directions for using guano. "Shade as a Fertilizer"—strictures on a previous article with the same caption. Both writers seem to admit as a fact, that successive crops of wood enrich the soil. On the principle of the advantages of rotation, wood may prepare the soil for the growth of ordinary cultivated crops, but from observation, I conclude that each successive crop of wood grows slower and smaller than its successor—thus indicating the inability of the soil to produce wood crops, as well as corn crops, indefinitely. "Mr. King's Address at Northampton" opposes the use of manure as a top-dressing.

POULTRY.

Although a little provoked at our own hens for adopting a line of policy by which we have eggs plenty when they are cheap, but none at all when they would sell at good advantage, we cannot help admiring the very pretty "Poultry House" figured and described by the editor in this number. Biddies that live in this top-knot style, certainly ought to emulate the exploits of that old speckled hen, whose sad fate is commemorated by the few successors of the ancient Bards, who yet sing the songs of yore.

ROOTS.

The writer of the article "Carrots," &c., gets into a sad snarl by trying to learn the value of this root from tables of analysis, and published statements and opinions. Is it not time that agricultural writers and speakers learn caution in the use of stray facts and tables of figures? "Cultivation of Roots" tells how to raise carrots so as to make money by the operation,—after hitting me a slap for going back to the old well-curb, by which means our well is famed as the best water in the neighborhood.

SCIENTIFIC.

"The Symmetry of the Solar System," an article contending that all truth in astronomy is not yet developed, and that the science is not always to remain where it was left two hundred years ago. It also contains some general remarks on Symmetry, that I commend to the consideration of those who adopt the principle latterly taught in high quarters, that "confusion," in laying out grounds, planting trees, and even in the arrangement of buildings, is the highest manifestation of skill and taste that man is capable of. "Tripoli or Burgmeal," is the caption of a letter from Prof. C. T. Jackson, showing that specimens of a deposite found in a pond in Maine, are composed of very minute shells. I regret that an examination which suggested the thought that

"The very dust we tread upon was once alive,"

should have been the occasion for introducing a pun couched in language that can be tolerated in few respectable families. The "Chemistry of Plants."

VARIETY.

From "Mr. Coming's Address" we have have two pictures—Foolish Farming, and Profitable Farming. "Mountains of Vermont." A taste for mountain scenery seems to be rapidly increasing among the pleasure-seeking classes of our cities. And well it may. Whoever has stood upon a high mountain, has one bright spot in his memory. My own pilgrimage to the summit of old Mansfield, years ago, was so pleasant, that I hope many people will accept the invitation of friend Milan, to try the hospitality of Stow people, and the splendid view from the top of this mountain. Many other articles must be passed over with a brief, or no notice at all, such as, "Chrystal Palace Rewards;" "Quackery in Farming;" "Farm for Experiments;" "Rearing Calves;" on the trial of "Reaping Machines," "Underdraining," &c.

A Reader.

Winchester, March, 1854.

For the New England Farmer.

POTATO ROT.

Mr. Editor:—The potato as an article of food has become one of the most necessary and important productions from the soil that is cultivated by the farmer. And as all classes feel the loss of the potato, so much so that a table of meats and vegetables cannot be spread without it, the article must always be prized, as being one of the necessaries of life. The fearful malady in shape of the "rot" that has spread over the whole country and other countries in the last ten years, has caused much alarm among all cultivators as to its real cause, whether a remedy for it can be found out, or whether the cultivation of the potato will not finally have to be abandoned altogether. As to the real cause of the "disease," it is presumed that we all know as much about it now, as we shall in the next ten or twenty years to come, and that, in reality, is just no knowledge at all.—And all the certain and sure remedies which have been put forth by different individuals, we consider not to be worth one red cent as a cure or preventive, as a general thing. For instance, one man puts salt and lime into his potato hills and they do not rot; another cultivator cuts off the tops of the potatoes in the latter part of the season, as soon as the rust strikes them, and that saves his crop. Another farmer plants his crop on high and dry ground with little or no manure, and that saves his crop, and so on to the end of the chapter. And yet it is enough to know for us all, that the potato has and continues to rot in all seasons and soils, climates, conditions of culture, &c.

Whether this disease will continue for another ten years of course we know not, but are inclined to think, however, that in time it will run out by cultivation, and the potatoes become sound again. As to the general mode of potato culture, there are probably almost as many plans and theories, as there are farmers, and perhaps every cultivator will have his own way of doing the business. With many farmers there has been a great change in the manner of cultivating the crop in the last few years, while many others follow the same system that they did twenty-five or thirty years ago; "no change" is written on their system, which they prove by their works.

It would be a matter of curious history for the future to know how many certain and "sure remedies for the potato rot" have been put forth during the last ten years, by different individuals in this and other countries. So far as our knowledge goes, we know not of the first "line" of reliable information whereby any plan has yet been brought out as a certain preventive against the disease.

We have been led to these remarks by seeing an advertisement in the last number of the *Country Gentleman*, headed "*Potato Rot—a remedy by wise importation and reproduction. Valuable potatoes for sale, &c.*" These potatoes are for sale by Chauncy E. Goodrich, of Utica, N. Y., and are what he calls "The Rough Purple Chili," imported at great expense from South America in 1851, and they are now offered for sale at the very moderate price of eight dollars per bushel. Mr. Goodrich says that in 1853, his seed potatoes were scattered over twelve Northern States and that reports have been heard from nine States, and but two cases of rot have been reported. Now taking Mr. Goodrich at his own word and his seed potatoes and importations, and we say they are not a "wise remedy against potato rot." Because if they were, they would not rot at all under any circumstances of cultivation or soil, climate, &c. That new and valuable varieties may be brought out by Mr. Goodrich's plan by importing and producing seedlings from the ball we do not doubt. But the system is not new at all, as it has been practiced by a great many other cultivators since the "rot" made its appearance. But that this system of importing and reproducing from the ball, will give that hardiness of constitution which Mr. Goodrich tells for, we do not so readily believe. And possibly his seed potatoes may be worth the price asked for them, as every cultivator will be his own judge on that point. What we contend against is, of offering for sale seed potatoes of that character as a sure remedy against "rot" when it is no such thing, as Mr. Goodrich well knows. We repeat what we have often said before, that as yet no certain or sure remedy against the "potato disease" has been found out. But if ever such a remedy can be found out, it will be worth while to have it made known, and let the "finder" be well rewarded for his labor.

Yours truly, L. Durand.

Derby, Ct., Feb. 25th, 1854.

USE OF GUANO.

There seeems to be still considerable misapprehension as to the proper way of applying guano as a fertilizer, and a word or two at this time, when so many are making preparations to use it, may not be inappropriate. The question is often asked whether guano will prove a *permanent* fertilizer—that is, as permanent as the common manures of the farm? Our own experience on this point has not been extended through a sufficient space of time, to justify the expression of a decided opinion. We have supposed, however, that the coarser and less concentrated manures of the farm would have a more permanent action than guano. For instance: we have supposed that an acre of sward land, plowed, manured with twenty loads of the common barn-yard or cellar manure, and planted with corn two years, receiving the same quantity of manure the second year that it did the first, and the third year sowed with oats, or barley and grass seed, would continue to produce fair crops of grass, much larger than an acre of the same land would, treated with 300 pounds of guano to the acre, for the same time. Coarse manures, covered up in the soil, undergo a process of fermentation, and *gradually* give off their properties to the roots in which they come in contact; while guano, already highly concentrated, and volatile, must, we think, give off its ammonia, and other properties, much sooner than the coarser manures.

Lacking experience ourselves, as already mentioned, we have sought to learn that of others, and in that experience find our opinions abundantly sustained.

Com. Thos. Ap. C. Jones, a gentleman of extensive travel, and the hero of the Monterey affair on the Pacific during the war with Mexico, cultivates a farm in Fairfax Co., Va., about 12 miles from the city of Washington. Most of the land of that county had become so impoverished by repeated tobacco crops, that it was proverbial, that the more of it a man owned the poorer he was. We have passed his farm many times and seen his fine wheat, corn and clover fields, in wide contrast with those of many of his neighbors, and once called at his mansion to have a little social chat with him on subjects agricultural, but he was not at home. We know enough, however, of his modes of cultivation, and his character for uprightness and sound discrimination, to place great confidence in whatever he says in relation to these subjects.

Com. Jones presented an essay to the Maryland State Agricultural Society, last fall, upon which the Judges awarded him the prize. This essay is mostly a detail of his own practice and experiences, and a paper which we should be glad to lay before our readers without abbreviation; but it is too long, occupying eight or ten closely printed pages of the *American Farmer*.

But it is with reference to what he says of guano that we have introduced the Commodore and his excellent essay. He says, "guano should not be applied the second time to the same land, unless in combination with other fine manures; nor should it ever be applied in its crude state, to land that is in good heart, i. e., land that will bring thirty bushels of Indian corn, or 15 bushels of wheat per acre without it; not but that guano in some such land might increase the product of both wheat and corn, enough to pay for itself, but if it should, the soil will be robbed of its fertility, and will be left in a far worse condition than when the guano was first applied; at least, such have been my own results in its use, and such is the universal character of guano in Peru, as I then learned upon personal inquiry, from the mouth of all persons (with whom I conversed) engaged in gardening and agricultural pursuits around the city of Lima, the capitol of Peru, from whence we obtain the best guano. I have frequently been in Peru, first in 1835, again in 1842—3, and more recently in 1848, and on each and every occasion, I took the greatest pains to obtain all possible information as to

the value of guano as a manure, and the mode of applying it to field and garden culture, as well as to its *effects upon the land*, and with one accord and without a solitary exception, I was told that land stimulated by the use of guano, soon became utterly worthless, unless the stimulus was kept up by repeated applications. This was the reason assigned for so little use made of guano where the cost of the article is merely nominal, not exceeding more than half what we willingly pay for leached ashes in the District of Columbia.

Another question constantly asked, is,—"With what shall we mix guano before using it?" If sown broadcast, we see no other good reason for mixing it than the greater convenience of sowing, —and in that case we should mix with some of the soil upon which we were sowing. If to be applied to the hill, there is danger of destroying the seed if it comes in contact with the unadulterated guano. There seems to be a great desire to mix it with something,—but until those using it know what the effect of such mixing is, they had better use it alone, when broadcast, or mixed with loam when used in the hill. Dropping and mingling in the hill amounts to the same thing, but it is a more tedious work.

On this point, too, we are able to turn to testimony of the highest character. Levi Bartlett, Esq., the able associate editor of the *Journal of Agriculture*, in an article in the March number on "Guano, Ammonia, and some other things," says:—

"It is a very common thing for farmers to mix gypsum with their guano, for the alleged purpose of *fixing* the ammonia. The theory of this is, that the sulphuric acid of the gypsum, will combine with the ammonia of the guano, forming the non-volatile sulphate of ammonia, and the carbonic acid of the ammonia will unite with the lime, resulting in carbonate of lime. Now, this is true, if the gypsum is in solution; but it requires some 500 pounds of water to dssolve one pound of gypsum. But in a state of *moist powder*, gypsum, brought in contact with guano, liberates the ammonia, and it flies off and escapes into the air.

Some two years ago, a writer in the *Richmond Whig*, with the signature of T. S. P., (supposed to be Thomas S. Pleasants, of Petersburg, Va.,) states that he had recently taken some pains to 'investigate the matter, and thinks he has obtained a number of important facts.' His investigations related chiefly to mixing plaster with guano. He says, 'the result was, that in nearly every case, the action of guano was impaired by the addition of plaster, very much in proportion to the quantity of gypsum employed. When mixed together in anything like equal proportions, the effect of the guano was entirely destroyed. In one or two instances, where plaster had been liberally used with stable manure, the effect was equally injurious.'"

This is testimony not easily invalidated, and we have no doubt is correct.

For the New England Farmer.

EFFECTS OF INNOCULATION.

Mr. Editor:—In the reports of the Legislative Agricultural meetings of last winter, I remember reading a statement made by one of the speakers, respecting the effects of innoculation on the longevity of fruit trees, in which he contended that innoculation did not tend to shorten the life of the tree; without attempting to discuss this ever interesting and very important question in the economy of fruit-culture, I would present a few facts relative to a very aged peach tree, which may go towards forming that great cluster of facts which make the kernel of a general truth.

Every farmer in Massachusetts looks upon his peach tree as comparatively a short-lived tree, of rapid growth, quick maturity and speedy old age. Yet in sunny France, as Mr. J. J. Thomas informs us, trees which are here annually and freely pruned, have lived to the age of one hundred years; and in northern Ohio and western New York, the peach tree has been known to bear fruit for forty or fifty years. Yet even in these most favored regions of our land, a peach tree which verges towards half a century is an anomaly which almost calls for a pilgrimage. We should not expect, therefore, to find trees of so venerable an age growing among the bleak hills of Massachusetts, much less should we look for such on an inhospitable seacoast, exposed, too, to the blighting influences of our chilly east winds. Yet we can record one instance, which perhaps may elicit others.

Hearing that in a field in the outskirts of the town of Marblehead, there lately stood a very aged peach tree, I visited the locality in the summer of 1852, and found the tree yet standing, in the midst of a mowing field situated in a low plain, about half a mile from the sea on the south. On the south the sea was in view, and on the south-east the plain was terminated by a range of hills close bordering the ocean. A hill rose gently towards the north-east, sufficiently to afford some protection. Excepting a hill-top, a more exposed situation could not easily be found. The tree was standing in what was probably a gravelly soil, among a quantity of loose stones, then newly covered with turf. From within a foot of the centre of the trunk, a low ledge rose abruptly at an angle of about 60°, extending some twenty-four feet towards the N. East, and rising five feet from the surface. The tree has two distinct trunks, which apparently were once united below the surface, but were then so decayed as to have no apparent contact. The main trunk leaned at quite an angle toward the N. East. The tree was about twelve feet in height, with a diameter of about one foot at the surface; the head was small. Though at the time I visited it, it was entirely dead, yet it had some life the year previous, and within four years had yielded a crop of a bushel.

Upon making inquiry of several highly respectable citizens, I was informed by one, that his remembrance of the tree extended back thirty-five years; that this was the only tree which had ever stood on the spot; that during this period the field had been plowed twice. By another, that he was certain the tree stood there forty-six or seven years ago, and was then of size. By a third, that he remembered it when a young boy FIFTY-SEVEN years ago, and that then it was a bearing tree; that at that time and ever since it has been the mark for

every school-boy to pelt and rob. This was as far as I could trace back its history. Respecting its origin, the opinion uniformly given was, that it was a chance seedling; this is corroborated by the quality of the fruit, which one gentleman declared was "terrible" for eating, though good for preserving. I obtained a transverse section of the trunk, but could make out about forty rings of annual growth, though the later ones were so narrow and so much decayed, as to render them very liable to be overlooked. The conclusion to which I came, was, that this was a fine illustration of the strong preservative power of the natural stock, when unenfeebled by the cunning contrivances of man; imparting, in this instance, a tenacity of life that had enabled it to contend successfully for over half a century, against the neglect of men, the rudeness of boys, and the opposition of the elements.

JAMES J. H. GREGORY.

Hingham, Mass., Feb. 7, 1854.

NEW BOOKS.

AMERICAN FRUIT GROWER'S GUIDE. A new work on Fruit, by F. R. ELLIOT, Esq. New York: Saxton, 152 Fulton Street, 1854.

From the cursory examination we have been able to give this work, we should pronounce it a good one. Mr. ELLIOT has had experience, and knows the importance of being cautious in the recommendation of fruits. No man, it seems to us, is fully qualified to compile such a book, who has not gone through the trial of rearing trees, as carefully as he has his own children, and found them at last, bitter everywhere, both in the "mouth" and in the "belly." Among the little things of life there is scarcely a keener disappointment than this.

The illustrations of this work are far more striking and satisfactory for showing the inside as well as the outline. The fruits are represented as *cut open*, showing the core and seeds, and sometimes the appearance of the pulp. The book is printed in SAXTON'S good style, and has a good index. One of our most accomplished fruit growers thinks the author has not done himself full credit in the delineations—that many of them are not as large as the fruits represented will justify. When a second edition is printed, we suggest that instead of the words, "index of fruits," being placed on the top of each page over the index as a running title, that the names of the fruit be inserted, as "Apples—peaches—plums," &c. Upon the whole, the "American Fruit Grower's Guide," though not without its faults, is the best work we have on the subject.

FIRST LESSONS IN CHEMISTRY AND GEOLOGY, as applied to Agriculture. Boston: Dayton & Wentworth, 1854.

This is a capital little work, designed for schools, and will introduce these interesting subjects to the pupil in many different ways, make him familiar with the terms used, and increase his love for rural occupations by enlightening his mind in relation to them. We shall be glad to see such a work introduced into all our schools, and that the girls will be required to study it as well as the boys. Dayton & Wentworth, Boston, 1854.

THE CULTURE OF THE GRAPE AND WINE-MAKING: BY ROBERT BUCHANAN. With an appendix containing directions for the CULTIVATION OF THE STRAWBERRY, BY N. LONGWORTH. Fifth Edition. Cincinnati: Moore, Anderson & Co., Publishers.

This work gives the mode of cultivating the various kinds of grapes in vineyards for wine-making, and the manner of making the wine, and we have no doubt is a safe guide to those engaged in the business. Indeed, the book appears to be filled with what the cultivators of the vine ought to know. We might read the book with a better relish, perhaps, had we tested the sparkling Catawba itself! The article on the Culture of the Strawberry is full of interest to everybody who has once tasted strawberry and cream. Better judges than ourselves on the subject of the grape, say the work is an excellent one.

For the New England Farmer.

TO DESTROY THE CURCULIO.

MR. BROWN:—I perceive your Burrillville, R. I., correspondent has been much annoyed by that most villanous insect, the curculio. To prevent the ravages of this "bug" the "specifics" recommended have been many, and with the exception of two, they have proved as effectual with me as with the gentleman referred to. Now though I do not expect to advance an original idea, I will proceed to give the details of a plan which has proved more effectual than all others, in diminishing the number of those troublesome scamps, at least so far as my own experience is a fair test.

Take ten yards (and if your trees are very large, more will be required, and add another breadth) of cheap sheeting, cut the same in three equal parts and have them sewed together so as to form a mammoth sheet, cut half way through the middle, and have it hemmed; with this you can completely cover the ground under the trees, and with the aid of two or three children to assist in holding the corners and spreading the same, a vast number of curculios may be destroyed in one hour's time. The way to proceed is this: after your sheet is spread give the trees a sudden jar, if the trunks are not more than three inches in diameter, nothing more than the hand will be required; if trees are large, have at hand a large mallet with the corners rounded off, and wound with cloth, under which there should be a little stuffing to prevent injury to the bark; strike with that square against the stem of the trees, then at once with a pair of pincers made of the thumb and fore finger, dispatch the curculios, or they will soon be off. Be sure and pinch hard enough to break their shells. If you have help sufficient to hold the sheet up to the lower branches when the tree is shaken, more curculios will be secured, for I have noticed that in their descent from high trees they sometimes fly before striking the cloth. If the insects are numerous, visit your trees once a day, say just before sunset, and you will thin them out fast.

If you have cherry trees in bearing, visit those with your sheet and mallet and pincers. Every

dozen insects treated in this way, makes the number less to propagate the species; but most other plans only drive them to other places, if indeed they have any effect at all.

The other method is, pick the fallen fruit, and either burn or empty it in the water where the embryo curculio will drown. I think this insect propagates its species as fast in apples, as in any other fruit. If any one doubts this, let him visit a tree laden with fruit, when it is about the size of cranberries, or walnuts, and carefully examine the abortive specimens with which the earth is sometimes literally covered; observe the crescent marks, and the small worms in the fruit, and I trust he will be convinced.

Where these fallen specimens are exposed to the scorching rays of the sun, it usually bakes them, and their contents; but when shaded, the embryo curculios nearly all mature. Pick and boil or empty this infected fruit into the river. This may seem like too much labor, but you will surely receive a rich reward for care and labor thus bestowed.

Dracut, Feb. 15, 1854. ASA CLEMENT.

For the New England Farmer.

SEWING MACHINE.

BY HENRY F. FRENCH.

"Work—work—work,
From weary chime to chime.
Work—work—work,
As prisoners work for crime,
Band and gusset and seam,
Seam and gusset and band,
Till the *heart* is sick, and the brain benumbed
As well as the weary hand." *Hood.*

TO THE LADIES OF NEW ENGLAND:—Were an angel to appear before you, some pleasant morning in spring, and say, that he had come to bestow upon you, for your patient endurance of life's wearisome labors, a reward of *two hours of time* daily—two hours of waking conscious, active time, for all your future life, how would your schemes of life expand. Your education and early associations have inspired you with a taste for literary pursuits, but family cares, the want of servants, and the want of *time*, have compelled you to relinquish them.

You were instructed in music and drawing in your youth, you cultivated flowers, and traced in botany, and its kindred studies, the curious analogies of nature, but in later years, your *time* has been filled with duties more imperative, and with a secret sigh, you have, without complaint, sacrificed on the household altar, the pleasures and graceful accomplishments of your early years. As to mere amusements, you could, well enough, bear that loss, but to feel that the cultivation of the *mind* must cease, that *you* must stop in the pursuit of knowledge, while husband and brother and friend are still advancing, to be conscious that the sympathy that once bound you together in intellectual pursuits, is daily lessening, this is a burden that no one can help you to bear.

Blessing the good angel for this most precious gift, you, who better than all others, know its value, would treasure it with sacred care. You would devote it, not to frivolous amusements, not to idleness, or dreamy listlessness, but to social enjoyments, to mental culture, and to active benevolence.

Constant physical labor is not, perhaps, a severe burden to the ignorant and degraded, but for one whose moral and intellectual training has elevated him to the true appreciation of life's great ends, a merely servile life, a life of manual labor, is not enough. To ladies of education and refinement, the petty toils and harassing cares of the family are trying, indeed, but when we add to those, the constant demand upon them for labor with the *needle*, an employment, trying alike to the patience, the sight, and the nervous system, an employment which never ends, which takes every moment that ought to be given to leisure, amusement or reading, we have some idea of the value of the angel gift, with which we commenced.

The spiritualists tell us of the influence of mind over matter, how, by mere force of the human will, tables and other lifeless quadrupeds may be made to walk, as if alive, but the laws by which such things are done, are not sufficiently understood, to enable us to work out from them any valuable practical results. But the laws by which wood and iron may be constructed into *machinery*, and so made, instead of human bones and sinews, to perform servile labor, are working, always, for human comfort and human freedom.

Of this description is the recently invented *Sewing Machine*, an invention doubtless, sent down from Heaven, in answer to the prayers of suffering thousands, an invention destined to bestow upon New England women the priceless boon of time for mental cultivation and social enjoyment. Slavery to the needle is the peculiar slavery of New England ladies. The price of such labor, to those who are paid for it, is pitifully small, and yet the customs of society demand so large an amount of needlework, that even those, who among

us are accounted rich, cannot afford to pay for it. Other avenues to competency are opening to our daughters, who must labor to live. The pen of the editor, the types of the printer, the tools of the painter, the engraver and the designer, are already, partly, in female hands. Let us encourage the republican sentiment that labor is not degrading, and give employment to women, in whatever departments of mental and physical toil, she is found best fitted to fill. Let her teach in our schools, let her tend the looms in our factories, let her take the place of the dandies behind the counter, let her write in our banks and counting rooms, and keep the records in our offices. Give her the clerkships in our post offices and other departments of the government, and do not longer drive her from fair competition with the other sex, and so depress the value of her labor, and keep her dependent and helpless. Let a good education, and a pure character, be to your daughter, as to your son, a capital, that shall ensure an independent support. Read Hood's "Song of a Shirt," and then sneer, if you can, at the efforts of those, who are striving to provide for woman better rewards for labor than the poor pay of a sewing girl.

"Oh! men with sisters dear,
Oh! men with mothers and wives,
It is not *linen* you're wearing out,
But human creature's lives."

While female labor is finding more profitable employment than sewing, no relief could come to ladies in charge of families, except by the use of machinery. I am told, that the common sewing for a family of eight persons, would employ one sempstress constantly. Now this, in any part of our country, involves a great expense. At the South, where women are bought and sold, your *living* machines would cost, perhaps, a thousand dollars, and be very expensive to maintain. At the North, we cannot afford the expense of hiring such labor, but fortunately, we can now do what is far better than either. In my own house, in Exeter, we have in use, one of "Wilson's Stitching Machines," manufactured by Wheeler and Wilson.

It has been tested long enough to justify us in confidently recommending it to those who have large families, and what most of us, in New England, have therewith, limited means of support. A woman's pen is alone competent to set forth the advantages of this wonderful piece of mechanism.

The following statement is from the pen of Mrs. E. Oakes Smith, a lady not unknown to fame. The ladies of my own household assure me that the good qualities and conduct of the machine are by no means overstated:

Messrs. Wheeler & Wilson, Manufacturing Co.

Gentlemen:—Having had one of your sewing machines in my family for more than two months, I am willing, unsolicited, to give you my testimony in its favor. Adverse as I am to append my name to the ordinary projects of the day, I wish, nevertheless, to say something through such a medium that may benefit my sex.

In the first place then, your machine is all that it purports to be. I have myself learned to use it with skill, that I may pronounce understandingly upon its merits.

I have never had a needle broken in its use, nor has it in the least become disordered; notwithstanding that I have allowed several persons to learn upon it, and all kinds of household work has been executed thereon; indeed fine muslins and heavy broadcloths have tested not only its delicacy but strength also.

Secondly the work does not *rip*, and every housekeeper can appreciate that quality. The work is what is called stitching, and I find it much more elegant than a common hem for all needle purposes. It gives handsome finish to the tucks and hems of skirts, while in shirt-making no work done by the hand can compare with that executed upon the sewing machine.

No woman's eyes or fingers can execute work with an equal precision and finish.

Thirdly, it is a vast saving, not only of nerves and patience, but of time also. The machine is equal to the labor of nine or ten persons. One individual can sit profitably at the machine, and do that proportion of the work.

Now these are facts which I wish to present to the heads of families. I wish to see the petty toil of my sex lessened whenever it can legitimately be done. I find the sewing machine does this in one very essential branch of home industry, and, therefore, I wish to urge upon families and neighborhoods, to combine together and procure an instrument calculated so much to alleviate house hold toil.

If our brothers ply any vocation of thrift or necessity, they are careful to procure the best tools. They do not hesitate to expend hundreds and thousands for the purchase of all sorts of "labor-saving machines" to lighten their own burdens.

Now, will they not carry the principle further, and by the purchase of the sewing machine, lessen the toil, the anxieties and the wear and tear of nerves to their wives and daughters? I do not say say this to sell your machines, gentlemen, but I say it because I sympathize with my sex.

I know how wearisome is the bondage of the needle to woman, and I seize upon this invention of the sewing machine as one of the best means of relief the age affords us. I do not know that it is even second to the cotton-gin.

I look upon machinery as the great emancipator of the word, and am doubly thankful to see its benefits extended to the relief of us—our sex.

The price of this machine, $125, is to many quite startling. The man who can readily enough pay twice that sum for a piano, for a daughter who has no taste for music, or for an observatory and weathercock on his barn, or for a new carriage, which he does not need, and has not room for, in his buildings, cannot afford to pay so much, for so small a matter as his wife's health and happiness!

But I will not, even in jest, thus wrong my brother men. When they have once seen this little

machine in operation, when they have seen materials of all descriptions, from a cambric kerchief to a boy's overcoat, rapidly, faster than half a dozen persons can *fit* the work, beautifully stitched and finished, when they have seen the labor, which would have occupied the hands of the loved ones of their households the livelong day, performed in a single hour, they will be foremost in the experiment, and join in blessing the kind angel, which has brought this unexpected alleviation to the condition of New England matrons.

Exeter, N. H., March 28, 1854.

NATURAL BEAUTY OF ORNAMENTAL TREES.

Mr. Sleeper:—Excuse me, sir, if I once more call your attention to one of the most barbarous violations of good taste ever indulged in by the denizens of Boston, or any other city or town.

You will recollect that in the course of the last summer I wrote you a letter answering a query I had seen in your paper, as to the utility of scraping and whitewasiug shade and ornamental trees.

Lest I weary your patience, I will not repeat the detailed arguments I used to prove the folly and evil of such a proceeding, but will ask your attention a short time, whilst I pursue the subject a little farther.

That letter was written too late to remedy the evil of that year, and I take this early time to reawaken interest, with the hope of preventing its repetition.

The winter frosts are beginning to relax their hold, and the long spring rains are seeking to unlock the frozeen fastnesses of the earth: now, therefore, let all feel again the ardor of the last season to do their share towards beautifying nature. However much the rains may be able to thaw the earth, one benefit has already resulted from them, in the rejuvenating and re-developing of the mosses and lichens.

Perhaps you remember that I dwelt, in the before mentioned letter, at some length upon the rare beauties of color and form portrayed upon the boles of the trees, by the lichens and liverworts.

The long rains and misty weather of spring are peculiarly favorable to the development of this kind of beauty, and I now call upon you, and all lovers of nature, to look forth and recognize it around you; do you love the rich coloring of the painter's landscape! Look upon the stem of the first noble elm you meet, *unimproved by the hand of man*, and you will find the artist's boasted beauties set at nought.

When first your eye meets the tree's stem it will see only a rich deep brown, blue, or golden yellow, but as it lingers longer, as curiosity draws you nearer the tree, new charms will develop themselves with surprising rapidity; the uniform brown will separate into the most harmonious shading of red, brown and black; the blue will become now white, now blue, now purple or green; the golden yellow will burst upon you through the mist and gloom like the lingering of last summer's sun. You may see golden tints rivalling Claude's sunsets, and blacks and browns surpassing Rembrandt. If you are a lover of the beautiful in form, where can you find such mazy interweavings of ever changing and beautiful lines as in the outlines of lichens and liverworts, where frond overlies frond, or bending and rising, conform to the roughnesses of the bark. Can any one fail to bow with reverence before the deep scarred and furrowed bark that tells of wars with the elements, and battles fought and victories won, before we were even children; or when we see some kindly tuft of moss with its long gray locks bending and nodding over, and clasping, the broken stem, or decaying trunk, can we help comparing it to the grey hairs of age! Let no barbaric hand touch the bark of a forest tree; as soon scrape (to clean) the fair skin of your child or the surface of an alabaster statue.

I have met the argument of utility before, and shown its unsoundness, and now appeal to nothing but the love for God-given beauty. How disagreeable the contrast and shock, when gazing upon the outspread branches of some mighty tree, seeming the very impersonation of strength, grandeur, grace and beauty, our descending eye meets no easy gradation from the graceful sweep of the rich brown branches, blending with the harmoniously painted stem, but a tuft of brush on the top of a column of whitewashed wood. Let no one who has ever laid, or permitted another to lay a ruthless hand upon such charms, and remained unrepentant, dare to claim the least appreciation of the beautiful, or true taste—he must be devoid of it. Do you think the artist's eye could have suffered it, or the artist's hand executed it? No, it is the result of bad logic, aided by the *dicta* of some ignorant pretenders to the title of gardeners or foresters.

But before I leave the subject, allow me to say something regarding the planting of trees, and the kinds to be selected. In making plantations by the roadside or in our grounds, several conditions must be taken into account; beauty in the winter and early spring, shade and beauty in the summer, an easy and rapid growth, and particularly, if by the roadside, a desire to have them beautiful and healthy for *several* years.

Were they willing to bear the noise, dust and heat of cities, some of the evergreens would be most desirable, but for their perfection, fresh and free air is necessary.

Next to them is the American elm. Of late a cry has arisen against the elm, because it loses its leaves early and is liable to worms; the latter difficulty, care will for the most part remedy, and the former is more than counterbalanced by its wonderful combination of good qualities. No other tree combines at once elegance, delicate beauty, symmetry, grace, strength, power and grandeur, in any similar degree.

Begin now, sir, and watch the deciduous trees through the year, and see if at the end of it you do not agree with me that the American elm is nearer an evergreen than any other. Look at it now—with its stem and top delineated against the yellow evening sky; how soul-inspiring are the ideas it suggests. And now draw nearer; look up through its branches and see its tracery against the blue beyond, with the mazy interweaving of bough over bough, the elegant feathering of the spray, and the almost leaf-likeness of the buds. Wait now a little till the sun and rain have swelled those buds, and their bursting sides part for the coming seed. Now you will think it has leaved; but no! another change is taking place; the leaf is starting,

and before you are aware, the whole tree has leaped into green clad life.

Time passes, and other trees have also been covering their limbs with a green mantle. But soon the summer is gone, and before any other harbinger of the winter, the sensitive elm begins to leave the sober green for bright yellow, and our streets and lanes are decked for a gala day. The leaves drop—but has the beauty passed with them? Is it even diminished? We are no longer charmed with the rich luxuriance of vegetation and its color, but again we have the beautiful outline against the sky. Believe me, sir, I do not wish to detract from the claims of other ornamental trees, for few know them better or appreciate them more than I, but if we are to plant for the best effects in this *half winter climate*, the trees must have a *winter as well as summer beauty*.

Let all compare for themselves the naked charms of all the ornamental trees; look upon them in their parts, appreciate their wholes, and I doubt not most will agree with me, *that the American Elm is the most perfect of all deciduous trees*, and as an emblem of beauty, of that happy combination of parts necessary for the perfect whole, is unrivalled.

As to its easy, quick and sure growth, nothing need be said. One thing more and I have done. How long are trees planted in public streets expected to live? Is it not for many, many years? and do you suppose any of our city fathers or of their Irish foresters, *ever ask themselves how long-lived the tree they are about to set ought to be, by nature?* I assure you, sir, that *twenty years* will see many of the species of trees, now most often planted, *beyond their prime, and when they have died, and been removed, what kind of trees do you suppose will grow in their exhausted beds?* Very respecfully,

Roxbury, March 10, 1854. R. M C.

Boston Journal.

AMERICAN POMOLOGICAL SOCIETY.

The fifth session of this National Association, will be held at Horticultural Hall, in the city of Boston, Massachusetts, commencing on Wednesday, the thirteenth day of September next, at ten o'clock, A. M.

It is intended to make this assemblage one of the most interesting that has ever been held in this country, on the subject of Pomology. All Horticultural, Agricultural, and other kindred Associations, of North America, are therefore requested to send such number of delegates to this Convention, as they may deem expedient.

Pomologists, nurserymen, and all others interested in the cultivation of good fruit, are also invited to attend the coming session.

Among the objects of this Society, are the following:—

To ascertain, from practical experience, the relative value of varieties in different parts of our widely extended country. To hear the Reports of the various State Fruit Committees, and from a comparison of results, to learn what fruits are adapted to general cultivation; what varieties are suitable for particular localities; what new varieties give promise of being worthy of dissemination; and especially, what varieties are generally inferior or worthless, in all parts of the Union.

In order to facilitate these objects, and to collect and diffuse a knowledge of researches and discoveries in the science of Pomology, members and delegates are requested to contribute specimens of the fruits of their respective districts; also papers descriptive of their art of cultivation; of diseases and insects injurious to vegetation; of remedies for the same, and whatever may add to the interest and utility of the Association.

The Massachusetts Horticultural Society has generously offered to provide accommodations for the Society, and also to publish its proceedings free of expense.

All packages of fruit intended for exhibition, may therefore be addressed as follows:—"For the American Pomological Society, Horticultural Hall, School Street, Boston Mass.;" where a Committee will be in attendance to take charge of the same.

All societies to be represented, will please forward certificates of their several delegations, to the President of the American Pomological Society, at Boston.

MARSHALL P. WILDER, *President.*

H. W. S. CLEVELAND, *Secretary.*

Boston, April 1st, 1854.

ROOTS OF PLANTS—TRANSPLANTING.

The roots serve to hold the plant in its place in the earth, and at the same time perform the important functions of respiration, and of absorption of moisture and of the various matters which go to make up the substance of the plant. It is the only part of the plant which takes up the earthy matter, that is, the peculiar part of the plant. The power of the roots in absorbing water may be tested by taking a small plant from the earth and immersing its roots in a vessel of water; let it be a tumbler; and having another similar vessel with an equal quantity of water standing near. The difference in the diminution of the body of water in the two vessels will be very great, and will show the quantity absorbed by the plant. It will take up many times its own weight of water in a very short time. An experiment with four plants of spearmint in this way, being kept with their roots in water 56 days, proved that they took up about seven pints, the weight of which was about 54,000 grains, while their own weight was only 403 grains—being nearly twice and a half their own weight each day.

The absorption of the water by the roots must be in proportion to the exhalation by the leaves and the digestion and assimilation in the tissues in the plant, or it will suffer in health. This is the case in seasons of drought or in dry situations. The absorption is mostly performed by the new and growing root fibres or spongioles, which are spongy at the extremity. These young fibres are therefore of vital importance to the plant; and by breaking these, in removing a tree for transplanting, the power of absorbing nourishment is diminished, often to such a degree that the tree languishes, and sometimes perishes.

One of the most wonderful things in the vege-

table physiology is that each different plant should, by means of this absorbent power of the roots, take up only that peculiar earthy aliment which is suited to its constitution. Thus if a stalk of wheat and a pea vine grow together, the roots of the wheat take up the silex, while those of the pea take up the calcareous parts of the soil.

WHEAT.

According to the most correct analysis, wheat contains in one hundred parts, 33 per cent. of ashes, and these ashes consist of 12 per cent. lime, salts, and 51 of silicia, or sand. Hence, wheat will sometimes succeed after buckwheat, as they are composed of different elements, both of which may co-exist in the soil.

PEAS.

The soil for peas should not be too liberally enriched. A great degree of fertility appears not to be required to develop the excellencies of this crop, which is indebted less to the soil than many other vegetables, and more to the air, for the food which perfects its growth.

For the New England Farmer.

WARTS ON PLUM TREES.

Mr. Brown:—I had noticed that my plum trees, of which I have several varieties, during some years, were becoming disfigured by the unseemly excrescences, of which there have been so many complaints of late. I thought I would attempt, at least, to ascertain the cause, since this knowledge is indispensable to a cure. Last April, I resolved to cut up at the roots all the trees which had become very badly diseased, and to prune from the others all the branches which had become affected; for I had noticed in attempting to cut out the warts, that the wood was in almost every instance diseased to the heart. While engaged in this process, my son severed a number of the warts carefully from their stock, and placed them in a tumbler covered with a glass cup-plate. Two or three weeks subsequently, on a further examination of the trees, he found several warts which had commenced a vigorous growth, about which were a multitude of little white worms, apparently of the same species as those which later in the season committed such fearful depredations in the orchards and other fruit trees through the country. In some cases, these worms had formed their nest about the wart, in others, seemed imbedded under the bark, so that when disturbed, they would retire from view. But the wart, rather than the adjacent parts of the limb, seemed to be their home. This was before the worms made their appearance on the trees generally.

Several pieces of limb having these excrescences upon them, my son cut off, and we placed them with the warts before collected, in the tumbler, which we placed in a vessel of water, hoping thereby to prevent the escape of anything from it. The genial atmosphere of the house hastened the growth of the worms, and as our covering was not sufficiently close they escaped, and many of them were drowned, while some succeeded in swimming to the edge of the vessel, from which they let themselves down by their web to the table on which the vessel stood. These worms soon disappeared, but thus far we had discovered no change in the warts themselves.

Some days later, however, about the 20th of June, we found on examination of the tumbler, that these warts had become masses of black, porous matter, evidently eaten through and through by some worm. Still there was enough of cohesion about each mass to preserve its form, except that it was somewhat increased in size. Opening these masses, we discovered in each a small white grub with a dark head; in some, more than one grub. A few days later, this grub had become a chrysalis. Still later I examined again, and found on removing the cover, several small black flies, of slender form, such as we had never before noticed, some of which escaped us. These I supposed to proceed from the warts, because on examination I found in some of them certain little insects, evidently becoming transformed into flies. One chrysalis I opened, contained an insect of a grayish color, looking as much like a bug as a fly. Another contained the same insect in a torpid state, which after a little exposure to the air became active. These, I suppose, both became flies after the lapse of a little more time.

Of the connection between the little worms first mentioned, and the warts, I have no opinion, because they soon after appeared in countless myriads, on trees upon which there are no excrescences like those on plum trees.

From the other facts I draw the following inferences—that the little fly alluded to, is probably the mischief-maker in this case—that during the summer it deposits its egg in, on, or under, the bark, infusing therewith a poison that occasions the excrescence, which forms over the egg so as effectually to shield it—that here it lies through the winter, until the return of warm weather, when it hatches; becomes a grub—a chrysalis—a fly—thus reproducing its species—that the probable preventive of the ravages of the insect is to cut off, either in the autumn, or early in the spring, every branch on which an incipient wart makes its appearance, and burn it.

I know, Mr. Editor, that it is not commonly safe to base a theory upon a single experiment, or investigation. I therefore only give you the process of my investigation with its results, and my deductions therefrom, without any strong confidence that these deductions are correct. Perhaps others have investigated this matter in a similar way. If so, I hope we may learn the results.

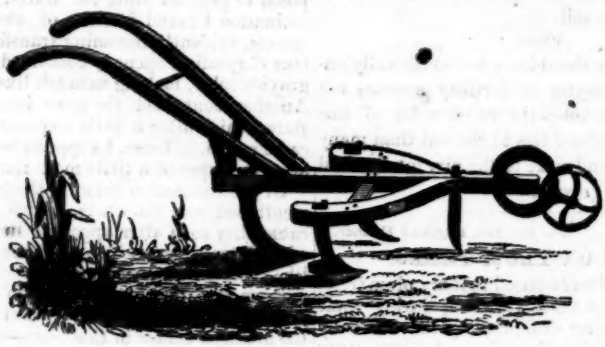
Certain it is, that unless something can be done to arrest the destruction now in progress among the plum trees of this region, we shall soon cease to enjoy this delicious fruit. L. Matthews.

Cornwall, Vt., Feb., 1854.

Fine Hogs.—A few days ago, we saw at stall 70, Quincy Market, eight of the finest porkers of the season. They were the property of J. Fogg, Esq., of Deerfield, Mass—¾ Suffolk, but one year old, and the lot weighed 2,428 pounds. They were fed on equal parts of broom corn seed and Indian corn, both ground, until the first of January, and after that time on corn meal alone. The first premium was awarded these swine at the Franklin Cattle Show last fall. The weight given above was after the shrinkage had been deducted. We have never seen a finer lot of pork.

THE HORSE HOE.

This cut represents an instrument recently invented by the manufacturers, Messrs. RUGGLES, NOURSE, MASON & Co., which they name the Horse Hoe, and which we have used through one season and have spoken of in terms of approbation. It is designed for the hoeing or cultivation of corn, the various root crops, cotton, hops, young nurseries, and hoed crops generally; is quite light, easily managed, and of very easy draught for one horse or mule; a thorough pulverizer of the surface-soil, and exterminator of weeds and grass. The forward tooth is simply a coulter, to keep the implement steady and in a straight-forward direction; the two side or middle teeth are miniature plows, which may be changed from one side to the other, so as to turn the earth from the rows at first weeding when the plants are small and tender, or towards them in later cultivation—at the option of the operator; the broad rear tooth effectually disposes of grasses and weeds, cutting off or rooting up all that come in its way, is a thorough pulverizer of the surface, sifting the earth and weeds through its iron prongs or fingers in the rear, leaving the weeds on the surface to wilt and die, and the ground level and mellow. For



hoeing carrots, turnips, &c., where the rows are narrow, the side teeth are taken out, and the rear tooth with the forward one as a director to guide the instrument, hoes and mellows the ground between the rows very perfectly. The mortises in the frame or wood work of this instrument are adapted to receive the kinds of teeth used in the Expanding and Reversable Tooth Cultivator, which we shall give next week.

For the New England Farmer.

POTASH AS A FERTILIZER.

MR. EDITOR:—Seeing an inquiry in your paper of 25th ult., whether any one had ever made use of the Carbonate of Potass as a fertilizer, I answer that I have tried it on a limited scale with satisfactory results. My immediate object, in the first place, was to kill out the sorrel in a garden bed. Having broken up a small piece in a favorable spot in a pasture for the purpose of raising carrots, I found in a few years that the sorrel was creeping in from the adjoining grass ground faster than I could conveniently destroy it by the use of ashes, lime or the hoe. I therefore selected a particular bed for the trial of the Potash, reserving others for other experiments, having for convenience divided the piece into beds 2 rods long and ¼ rod wide. As sorrel roots or rather runners are near the surface, I first levelled the bed, and then sowed on the surface 2 lbs. Saleratus, and raked it in with a common garden rake, scarcely doubting but that the ley would be so strong as to prevent my seeds from sprouting. But I was mistaken; they came up and grew finely. I have since tried it on other crops with decided good effect. My onions last year were the best I ever raised, but I am not certain but that some other fertilizers that I had applied in previous years aided in bringing about this result. The Potash seems to have a threefold beneficial effect. It not only *sweetens*, as it were, the ground, but furnishes food for plants, and serves to keep the soil moist by absolving moisture from the atmosphere.

As Ammonia is exceedingly volatile, I think the method of applying diluted Aqua Ammonia, as suggested by your correspondent, somewhat objectionable. I propose the following, instead, which will, at least, have this recommendation, "if it do no good it will do no harm." The Carbonate of Ammonia is made by mixing Chlor. Ammonia with Lime. Any one can satisfy himself of this by pulverizing a little of the former (the common Sal. Am. of the shops, which is not costly) with rather more than an equal quantity of pulverized Lime; A double decomposition takes place and Carb. Ammon. and Choride of Lime formed. Now if Lime be ploughed in, and intimately mixed with the soil at a considerable depth, and a small quantity of Sal. Ammon. be scattered on the surface and raked in, it will slowly and gradually dissolve, and coming in contact with lime, will give out Ammonia, which will be absorbed by the soil and be taken up by the plants as required by them. A similar mutual decomposition takes place, and Ammonia is evolved if pearlash is used instead of Lime. Perhaps charcoal would be a good addition as an absorbent. But after all, Mr. Editor, a single *line* of successful experiment is worth a whole page of theory. I hope that some of your readers who have leisure and means, will try the above and other experiments, and let us know the results, whether favorable or otherwise. I suppose that the particular proportions of the ingredients I have men-

tioned are of no great consequence, provided there be an excess of Alkali. Should this mode of generating Ammonia prove successful, and I see no reason why it will not, it may, after a few experiments to ascertain the proper quantities, be useful in preparing hot-beds, &c. G. P.

New Salem, March, 1854.

For the New England Farmer.

COUNTRY FARMERS AND CITY MECHANICS---No. 2.

Mr. Brown:—In my first article, which you did me the kindness to publish, I promised to say something at another time upon the subject of providing for and rearing families in the city and in the country. But I find it a much harder subject to write upon than to think about, as indeed most subjects are to those little accustomed to giving their thoughts a "local habitation and a name."

I remark, then, by way of beginning, that both my own experience and my observation of the experience of others, teach me that the advantages of a city are decidedly on the side of single or unmarried mechanics; and that it is from confining their observations to this class, that country people form a too favorable opinion of city life. I am willing to admit that an unmarried mechanic, if a superior workman, and blessed with health and those habits of economy learned only in the country, *may* lay up more money in the city, than a journeyman farmer can in the country; or, if a little given to display, that the city youth may dress and keep himself in better-looking style than can the farmer-boy—his boots may be higher polished, and so may his manners,—(both are sometimes injured by the process) and that on his visits to his country friends he may display a free-and-easy bearing in company that is admired by the ladies, and envied by the other sex who find themselves doomed to tread the "dull round their fathers trod."

But folks are not always young, not always single. In both city and country, matrimony seems to be as much in the course of nature, as the rheumatism or old age. The city mechanic with his ten dollars a week marries; and—a most favorable supposition—let him choose a country girl for his wife; one who was brought up to similar habits of economy with himself. Overpersuaded by the advice of city friends, they commence life by "boarding out." Six dollars and a half a week, leave three and a half for clothing, firewood, lights, &c. They soon find this will not do. They *must* keep house. Several half days are lost in "house-hunting," and the happy pair find themselves established in their humble home. Established? Have they bought the tenement they occupy, and mutually resolved to take hold and pay for it as quickly as possible, so that their home though homely may soon be their own? Nothing of the kind. City journeymen seldom think of such a thing. They have hired it—hired it for a month! Ten dollars a month for bare rooms to live in; but every body says it is *very* cheap. Many who have no larger wages pay one hundred and fifty, two hundred, two hundred and twenty-five, fifty, seventy-five, and even three hundred dollars a year.

Here then they have fairly "begun the world." Every thing has been "put to rights." The carpets, furniture, &c., which were selected almost as much on the opinions of their newly made city friends, as by their own taste, and which cost rather more than what their own judgment dictated as necessary to "begin with," have been arranged, and are all paid for. The good house-wife has had time to look about the premises a little more thoughtfully, and to contrast her new home with the old one that she left so willingly. She has much better furniture; her parlor, though smaller than the "square-room" of her father's house, is neater, prettier, nicer. But her empty cellar, or no cellar at all! She does wonder, as the "marketing" is brought home, that she used to think so little of the huge potato-bin, the barrels of pork, the firkins of butter, pots of lard, boxes of apples, heaps of "garden sauce," shelves of milk, cream, cheese, pickles, good old cider apple-sauce, &c., that used to clutter-up *their* cellar. Now, all these things must be purchased—and at *such* prices! Nine dollars for a little heap of coal, and the same for a cord of wood to kindle it, twenty-six cents for a pound of butter, thirty to forty for a peck of potatoes, twelve to twenty for a pound of fresh meat, twenty to thirty for a dozen of eggs, and luckly if not stale, at that,—every pound of lard, every string of onions, every quart of beans, every pint of milk, and even every pail of water (if they take the Cochituate) has a price, and a price that must be paid or the article cannot be had.

These are small things, to be sure, but "Small sands the mountains make," cents make dollars, and "trifles life," and it may be well for those who envy the large wages of city mechanics to heed even these small leaks that so many of us find quite sufficient to sink our ships.

Now, to put the result of our cogitations, thus far, into a sort of arithmetical statement, we will allow our young house-keepers three dollars a week for fires, lights, provisions, &c., two dollars and fifty cents a week for clothing, bedding, furniture, utensils, &c., and, say, twelve dollars a year for pew-rent and two for use of library, and for lectures,—making no allowance for a "hole in the pocket" that is so often found by the temptations of a city, none for theatres or concerts, none for cigars,—and we have,

	Dr.	
For rent of rooms, per year		$130,00
For provisions, &c.	"	156,00
For clothing, &c.	"	130,00
For pew-rent, library, &c.	"	14,00
		$430,00
	Cr.	
By wages at $10 per week		$520,00
Balance for a "rainy day"		$100,00

Before taking this result as the basis of a comparison of the relative profits of city mechanics and country farmers, several questions arise for discussion. Do all city mechanics get as much as ten dollars a week? Do not some get more? Do their families always consist of only two members? Are they ever sick, or out of work? Is their rent ever raised, or their pay cut down? Do they ever move, despite the caution of Franklin, that three removes are as bad as a fire? These questions can probably be answered by those who have the patience to read this article, as well as I shall do it if I make the attempt in a future number of the *Farmer*. A City Mechanic.

Boston, April, 1854.

For the New England Farmer.

THE PROFIT OF FATTENING SWINE.

The following facts are offered in corroboration of the views advanced in my late article on the profit of fattening swine in New England :—

On the 16th of December last, I purchased four pigs which were the remnants of two litters born about the same time in September previous, and put them in warm apartments, embracing a place for making compost and an eating room leading out of it. Once a fortnight or so during the winter, about a cord of either muck or scrapings from the woods was thrown into the pen, and daily the manure from two horses. The pigs were kept bountifully supplied with straw for bedding, which they arranged in one corner of the compost pen to suit themselves. Enough fermentation was generated in the compost to make their bed warm, and so far to keep out frost that it only appeared in a light scum during the very coldest days. The scrapings from the woods containing some nuts together with decayed sticks and roots, contributed to the health and thrift of the pigs.

From Dec 16th, to the 18th of March, the pigs had as much corn and cob-meal as they would readily eat, when it becoming inconvenient to accommodate them longer with apartments, they were sold to the butcher at 8c per lb.—he throwing in the slaughtering.

Immediately after feeding them at a given time, the meal for the next feeding was measured out and put in the bucket and hot water added—the contents standing in a warm place to soak and swell, and becoming very much increased in bulk before being fed to the pigs. The meal consumed was exactly measured from day to day, and the quantity is known to be as follows :—

First 29 days four pigs ate	348	quarts, or	12	quarts per day.
Next 49	"	"	882	"	18	"	"
Next 15	"	"	336	"	21	"	"

Total corn and cob consumed 1566 quarts, or 49 bushels.

In order to satisfy myself of the amount of corn involved in the above 49 bushels of corn and cob-meal, I have measured out enough corn in the ear to make, if shelled, just a bushel of corn, had it cracked and ground, and found it made by stricked measure a little more than two bushels of corn and cob-meal. An inferior quality of corn in the ear might not quite hold out measure when ground ; but I am satisfied that a full medium quality will hold out, where the toll is paid in money, and shall therefore call the above 49 bushels of corn and cob equal to 24½ bu. clear corn.

The four pigs weighed, dressed, 616 lbs., and made some 10 loads of compost more than would otherwise have been made. They may therefore be accounted with as follows :—

616 lbs. of pork, a 8 c., net		$49,28
Deduct 49 bu. corn and cob, or 24½ bu. clear corn, a $1 per bushel	,24,50	
Toll for grinding 49 bu. corn and cob, a 4 c. per bu	,1,96	
Paid for pigs, Dec. 16th, $4 each	16,00	42,46
Balance, over and above $1 per bu. for corn consumed, of 28 c. per bu., or in all		6,82
And the pigs have left 10 loads of compost, worth a bushel of corn each	10,00	
From which deduct, if you please, the cost of supplying the raw material, say 50 c. per load, which is rather too high	5,00	5,00
Profit on the four pigs		$11,82

I regret that I did not have the pigs weighed on the 16th of December, because if I had done so it would be easy now to find how much more pork a bushel of corn ground, cooked and fed with the addition of the cob was in this case made ; but from as exact an estimate as I can form, judging from the weight of some of the better pigs of these two litters, sold a few days previous to the time I bought mine, I am induced to think the pigs must have gained not far from 15 lbs. of pork for each bushel of clear corn consumed ; which, considering that the fattening process was conducted during the very coldest portion of the year, argues pretty well for feeding corn and cob ground together.

I have briefly to add to my former remarks on selecting pigs for fattening, that so far as I know, pigs of a round, barrel-like frame are apt to yield rather thin pork and too much offal ; but those having extra *depth* of carcase, and not so fine bred as to lack bone to sustain them while fattening, nor so coarse bred as to be too late in maturing, but of a just proportion in this regard, are the right kind for profit. Pigs bred too fine, early cripple in the legs when fed high, so that they are unable to exercise sufficiently to promote healthy appetites and strong digestion, and therefore make but light weight, and their pork is not generally so saleable nor desirable for domestic purposes as that of younger pigs of the first quality. Pigs with rough, staring bristles and a generally well look, are not so kindly to fatten as those of a mellow and wavy appearance and quiet disposition.

F. HOLBROOK.

Brattleboro', March 28, 1854.

PLANT THE FRUIT TREES.

Those who have the 4th volume of the Monthly *Farmer*, are referred to the excellent Essay by Col. WILDER, on the varieties and preservation of fruit, on pages 194 and 195, and to the list given by Mr. FRENCH, of Braintree, on page 197 ; also to a selection of pears on page 225, and on page 241, same volume for a list by Mr. JAQUES, of Worcester. But for the convenience of those who cannot make this reference, we give selections from the lists of these gentlemen.

COL. WILDER'S LIST.

APPLES.

For three sorts :
Large Early Bough,
Gravenstien,
Baldwin.
For six sorts, add :
Red Astrachan,
Porter,
Rhode Island Greening.
For twelve sorts, add :
Early Harvest,
Williams,
Minister,
Fameuse,
Hubbardston Nonsuch,
Roxbury Russet.
For Winter Sweet Apples :
Seaver Sweet,
Danvers Winter Sweet,
Tolman's Sweet,
Lyman Sweet.

PEARS.

For three varieties :
Bartlett,
Vicar of Winkfield,
Beurre d'Aremberg.
For six varieties, add :
Bloodgood,
Louise Bonne de Jersey,
Golden Beurre of Bilboa.
For twelve varieties, add :
Andrews,
Belle Lucrative,
Seckle,
Flemish Beauty,
Urbaniste,
Glout Morceau.

PEACHES.

For three sorts :
Early York (serrated foliage,)
Crawford's early,
Old Mixon Free.
For six sorts. add :
Large Early York,
George Fourth,
Crawford's Late.

Mr. French's List.

As the best *early* apple, Mr. French recommends the Early Harvest. The best apple is the White-Seek-no-further. If he had but one apple tree, he would prefer the R. I. Greening. The best sweet apple is the Seaver. For two varietes, he recommends the Porter and Rhode Island Greening. For the four best summer varieties, the Harvest, Red Astrachan, Williams Favorite, and Summer Pearmain. Four best autumn varieties, Porter, Fameuse, Gravenstein, and St. Lawrence. Best five winter varieties, R. I. Greening, White-Seeek-no-further, Baldwin, Roxbury Russet, and True Nonsuch. The best apple for stewing is the Hawthornder.

If he could have but one cherry, it would be Downer's Late Red; the best of all cherries is the Knight's Black Eagle. The earliest cherry that is prolific is the May Duke—the latest the Late Duke.

The Green Gage he considered the best of plums If one plum is to be selected, he would prefer Prince's Imperial Gage; for two, add Smith's Orleans; for three, Coe's Golden Drop.

George Jaques' List.

PEARS ON QUINCE.

NAME.	TIME OF RIPENING.
1. Beurre d'Amalis	September.
2. Louise Bonne de Jersey	Sept. and Oct.
3. Urbaniste	Oct. to Nov.
4. Duchesse d'Angouleme	November.
5. Beurre Diel	Nov. and Dec.
6. Glout Morceau	Dec. and Jan.

PEARS ON PEAR ROOTS.

1. Rosteizer	Aug. and Sept.
2. Bartlett	September (early.)
3. Flemish Beauty	September (late.)
4. Seckel	October.
5. Dix	Oct. and Nov.
6. Beurre d'Aremberg	Dec. and Jan.

Extending the list, I would add,—

7. Madeline	August.
8. Andrews	September.
9. Belle Lucrative	September.
10. Louise Bonne de Jersey	Sept. and Oct.
11. Urbaniste	Oct. and Nov.
12. Winter Nelis	Dec. and Jan.

APPLES.

1. Porter	Sept. and Oct.
2. Gravenstein	October.
3. Hubbardston Nonsuch	Nov. to Feb.
4. R. I. Greening	Nov. to March.
5. Baldwin	Dec. to March.
6. Roxbury Russet	March to June.

The best four sweetings, perhaps, are,—

1. Large Early Bough	August.
2. Jersey Sweeting	Sept. and Oct.
3. Danvers Winter	Nov. to April.
4. Ladies' Sweeting	Jan. to May.

We observe that in the above lists the old St. Michael is omitted. When in perfection, this pear is scarcely excelled by any that grows; or, at any rate, by only three or four varieties. Of late years, we are told that it has succeeded quite well in many localities. In setting even one dozen of trees, we should certainly include the St. Michael,—known also as the White Doyenne, Virgalieu, Butter Pear, &c.

For the New England Farmer.

ILLINOIS FARM IMPLEMENTS.

Mr. Editor:—A leader of the *New York Tribune* supposes a plow with other than a *cast iron* mould board, to be a curiosity now-a-days. Now without much humility, and as a corn grower of twelve years standing, in Suckerdom, I am free to say that I have never seen a cast iron mould board plow in use in Illinois; yet we do some plowing here. I propose giving a list and description of the implements I have in use for *working* the soil.

I use, in the first place, the "Breaking Plow," drawn by four yoke of oxen and cutting a slice twenty inches wide and two deep, or an inch and a half if quite level. The plow is 40 inches on the bar, 34 on the edge of wing, is provided with rolling cutter, and for mould-board is provided with 4 rods placed one above the other at intervals of 3 to 4 inches, thus saving much friction and weight, breaking 2½ acres per day. Next in order is the cast steel plow, with wrought iron bar, and cast iron upright; the wing and mould-board of cast steel from ¼ to ½ of an inch thick, cutting a furrow 15 inches wide, and from 3 to 7 inches deep, as is required. The entire plow weighs 60 lbs., and can be held with ease by a boy ten years old. For a span of horses weighing 2200 or 2400 lbs., 3¼ acres is a fair day's work. My harrow is an old-fashioned triangle frame with 19 teeth; a little behind the age.

For sowing small grain, I use a machine running on two wheels and drawn by one horse, sowing ten feet wide each passing and 20 acres per day. For marking up corn ground the first way I use a sled with 4 runners, 3 feet long 4 feet apart, and drawn by two horses; 30 acres is a day's work. Then with the "corn planter" drawn by a span of horses, with a boy to ride on the machine, and handle the tricker, and a hand to guide the team, 2 rods at a time are furrowed, crossed and covered, and 15 acres are planted per day.

The next is the "Cuitivator" used when the corn is small; then the "Tending Plows" of cast steel, and "rights and lefts" which we run by pairs. They cut a ten inch furrow in width, are rigged with one handle each, and one horse attached to each plow, but the plows are not attached to each other at all, only the horses are attached to each other by a double rein, such as are used always in driving a span, which the plowman puts under one arm and over the other shoulder, while he holds one plow in each hand. One horse and plow are upon either side of the row of corn, it passing under the plowman's right arm, as he extends it to the opposite side of the row to hold the right hand plow. Thus 7 or 8 acres are plowed a day, (one row being plowed at each passing) and 45 acres to the hand for the season.

I have used the "Pairs" or "Rights and Lefts" for four years, thereby doubling the amount of corn raised with the same labor, so far as tending is concerned. Henry W. Merriam.

Little Town, Tazewell Co., Ill. Feb., 28, 1854.

The Country Gentleman, Albany, N. Y. Luther Tucker, Publisher. There is not, in our opinion, a more valuable agricultural journal in the country than the one with the title above. Its views are sound and clearly expressed. The paper

is made up by one who has a Printer's eye, and a Printer's ☞. The type is clear, the paper good, and the whole managed with so much good taste and good nature, that it is a model for us all; and if this paragraph should cause a thousand persons to take it, *pay* for it and read it, we shall be glad.

EXTRACTS AND REPLIES.

CRANBERRIES.

In the March No., I observed an article on cranberry culture, and as I design going into the business to the extent of a few acres, I want to inquire of some of your numerous correspondents who may have had experience in the business, in regard to the liability of the plants being hove out of the ground by the action of frost, in what we call wet, cold, heavy land, and thus killed. As we have a good supply of this kind of land in Berkshire, it may be turned to good account if the vines will stand the frost. Wm. Noble, Jr.

Remarks.—Some of our readers, we know, have had experience in this matter, and perhaps, will aid brother Noble in his operations.

PALMER WORMS.

Mr. Editor:—Anticipating another visit from those destructive insects, called palmer worms, the present season, some of us have began to tar our apple trees, and have caught a great many millers and grubs, a sample of which I send you. I suppose the millers to be the male, and the grubs the female, as by inspection you will find them to contain a large number of eggs; the tar should be applied every day, just before night, which can be done with little labor, with a paint brush, having the tar warm if the weather is cold. c. s. w.

Chester, N. H., April 10th, 1854.

Remarks.—The insects had no form or comeliness left, when they reached us.

STEEP FOR SEED CORN.

In your next paper please give your opinion upon the subject of steeping seed corn; and what is the best substance for such a purpose; also, whether any of the concentrated manures have been profitably applied to potatoes. Being a young farmer I desire to obtain information on the above points. Ora J. Taylor.

Ludlow, Vt.

Remarks.—See article in another column, about seed corn. We can tell you nothing satisfactory about the potatoes.

USE OF SALERATUS, &c., IN BREAD-MAKING.

To D. F., *Canaan Four Corners, Columbia Co., N. Y.*—We should be pleased to see your essay on this subject, but could only extract briefly from it.

BUCKWHEAT AND OATS.

John Hammett, *Chilmark, Mass.*—Buckwheat is the crop usually sowed for a green crop to turn under. A bushel of seed is sufficient for good rich land, where the seed is the desired crop. Taking that quantity as the standard, and on a rich soil, the poorer the land the more seed will be required.

BEET, TURNIP AND CARROT SEED FOR AN ACRE.

A Subscriber, *Warren, Vt.*—Of beet seed, it will require between 3 and 4 pounds to sow an acre with a seed sower; of turnip seed, ½ to 1 pound; and of carrot seed from 1 to 2 pounds.

PUMPKINS.

M. Hinckley, *Barnstable.*—Make your land as rich as you can—place the hills 8 feet apart, and before dropping the seed, scatter some fine manure over them; leave a dozen plants for the bugs, for awhile, then select one or two of the best for runners. After they have gone as far as you think a pumpkin vine ought to travel in a single season, pinch off the ends of some of them and see what the effect will be.

A BARREN PEAR TREE—POUDRETTE.

New Subscriber, *Eliot, Me.*—Can a fruit tree be compelled to bear fruit? The tree in question was grafted to the Pound pear, at the time being about two inches in diameter. I let it remain six years, and never received a pear from it, then cut the top off, and grafted it to the Bartlett pear, which was four years since, and still no pears yet. I thought I would let it alone this year; if it bore fruit, well, if not, I should remove it, root and branch. If there is any thing you can tell me to cause it to bear fruit you will oblige me much. The tree is thrifty, and of good size.

When should poudrette be applied to corn; in the hill at planting, or on the surface at the coming of the corn? and how much to a hill?

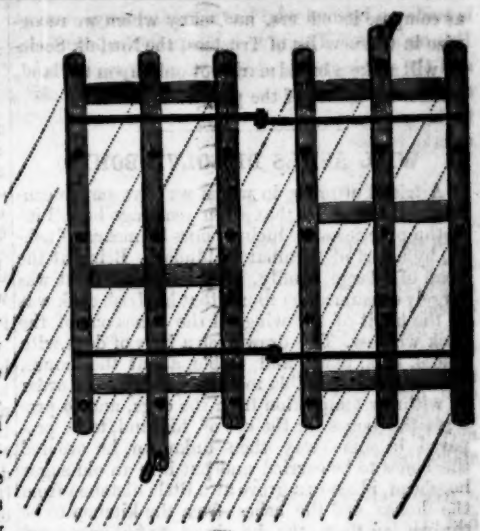
Remarks.—If your pear tree does not blossom this spring and set the fruit, in June, say from the 10th to the 15th, with a sharp knife slit the outer bark down carefully, and remove it all from the first set of limbs to the ground, and next year your tree will probably fruit. Apply poudrette broadcast, or in the hill before planting—a gill or more to the hill.

STUFFING BIRDS.

E. N., Jr., *North Dighton.*—We have sent you, by mail, a copy of the monthly *Farmer*, for July, 1852, containing full directions how to stuff birds.

Mr. J. W. Colburne, of Springfield, Vt., writes that he raised on his farm the past season 7½ acre, of corn, which averages 105 *bushels to the acre, weighing* 56 *lbs. per bushel, and the cobs* 12 *lbs.*—In the spring of 1852 he applied 40 ox-cart loads of manure to each acre, and last spring 50 ox-cart loads more, making 90 loads to each acre in two years—each load containing 35 bushels, potato measure. The corn was planted on the 16th of May, with the corn-planter, dropping plaster and ashes with the seed, about 5 bushels to the acre. At the first hoeing, a single handful of ashes and plaster was applied to each hill, and after the second hoeing a table-spoonful of plaster alone.—Three stalks were left in each hill. For this crop, Mr. Colburne received the first premium, both from the Vermont State and Windsor County Societies.

IMPROVED HINGE HARROW.



Among the various kinds of harrows in use, we are inclined to think that the one represented above, which we find illustrated in the Catalogue of Messrs. Ruggles, Nourse, Mason & Co., will be found to possess more advantages than any other.

This harrow is usually made to take a breadth of 5 feet. It is composed of two pieces of framework, connected to each other by iron hinges coming together like common barn-door hinges, and which, extending across the pieces widthwise, are bolted to each bar, thus greatly strengthening the harrow. The ends of the bars are secured from splitting by iron rivets. The harrow may be folded double, or separated into two parts for the convenience of transportation or other purpose. Either half may be lifted for any purpose while the implement is in motion; and the easy and independent play of the parts up and down upon the hinges, enables the instrument to adapt itself to the surface of the ground in all places, so that whether going through hollows, or over knolls and ridges, it is always at work, and every tooth has an operation upon the soil. There are thirty teeth in the harrow, and yet they stand equi-distant and wide apart each way, so that while from their number and arrangement the ground is worked fine, they are not liable to clog. This harrow is made heavy for rough land and the pulverizing of sod furrows, or light for grain and grass seed. It is a very light, pretty harrow for one horse, when made of bars 2½ inches square, with teeth of half-inch steel; and thus made, and carrying a breadth of five feet, one horse will harrow as much ground, in a day with it, as is usually accomplished by two horses. It is made to draw either end forward; and when the teeth become dull by working in one direction forward, the teeth may be hitched to the other end, and they are sharp again.

For the New England Farmer.

CATTLE OF NEW ENGLAND.

On the last page of an interesting paper on the climate of New England, from the pen of Hon. John C. Gray, President of Massachusetts Society for Promotion of Agriculture, we find the following sentence—"A race of cattle has grown up among us which, though a very moderate degree of attention has been paid to them on the whole, is highly distinguished by its valuable qualities in every essential particular; and although the importation of valuable foreign animals should by no means be discouraged, it is far from certain that the best mode of improving our domestic cattle is not by careful selections from our own stock." It is pleasing to find the views heretofore put forth by Pickering, Lowell and Colman, in relation to the cattle bred and born on the rocky hills of New England, so fully indorsed by one so competent to judge. If we do not mistake, these are the sentiments of the reflecting yeomanry of the country. If this be so, let our motto be—improve the native breed.

March 4, 1854.

NORFOLK AGRICULTURAL SOCIETY.

We notice by the *Dedham Gazette*, that the Sixth Annual Meeting of this Society was holden at Dedham, on Wednesday, the 29th of March. Officers and a Board of 6 Trustees were elected for the year:—

MARSHALL P. WILDER, *President.*

BENJAMIN V. FRENCH,
SAMUEL D. BRADFORD,
CHEEVER NEWHALL,
JOHN GARDNER,
RALPH SAWYER,
CHARLES C. SEWALL,
} *Vice Presidents.*

Hon. Thomas Motley, of Dedham, introduced the following motion which was unanimously adopted:—

That the thanks of this society be and are hereby presented to Hon. Marshall P. Wilder, for his very able and untiring exertions in the cause of Agriculture in general, and especially for his devotion to the best interests of this society from its commencement, and also for his consent to yield to us those acceptable services for another year.

On the adoption of the above vote Mr. Wilder arose, and in an eloquent and feeling manner, acknowledged the gratitude and happiness experienced, in finding that his services in behalf of the society and to the great cause of agriculture, had been appreciated and declared. He confessed that he had been a lover and devotee of the cause of agriculture from his earliest years, and that he had spent a large part of his life in its service, with no hope of reward beyond the general welfare, and the generous and kind appreciation of its friends and the community. He trusted that the society would continue to prosper, that its benefits to all classes of the community would be increased, and to that end his services, while living, should never be wanting.

The efforts of the Norfolk Society have been singularly successful—not lucky, there has been no luck about it, but this success has been the legitimate result of good management and hard work; controlling everything at the right moment, and leaving nothing to chance. With such men

as compose its officers, and many whom we recognize in the new list of Trustees, the Norfolk Society will make a broad mark not only upon the land, but on the minds of the people.

WIIL ASHES DISSOLVE BONES.

A friend of ours, in whom we have entire confidence, informs us that seven years ago he fell into the practice of reducing bones by means of ashes, by a sort of fortunate blunder. Being at the head of a large family, in which fresh meat was largely consumed, he found that his Irish cook was in the habit of throwing all the bones out of the back window. This drew such a bevy of dogs, with voices, bass, tenor and treble, about the house, that it was impossible to sleep quietly. In order to withraw temptation from the dogs, and to preserve the bones for the use of his land, to be prepared in some way then unknown, he ordered the bones to be carried and put into an old sugar hogshead, place in a grove at a little distance from the house, and the ashes from the kitchen to be thrown on them, the hogshead to be uncovered that the rain might fall into it. Whenever an offensive smell arose from the bones, which was only in dry times, he found that a little water thrown on prevented it. As soon as the first hogshead was full, another was placed by it and filled, and then another. His intention was to use the ashes and bones on Indian corn, supposing that by the next spring the bones would be somewhat softened so much so that they might be pounded to pieces with a sledge hammer on a flat stone. The hammer and stone were actually procured for the purpose. But no bones were found, except near the top of the hogshead last filled. Instead of the bones, were found soft soponaceous masses, retaining the form and size of the original bones, but none of their hardness. They were easily cut through with a shovel and mixed with the ashes; and when so mixed and applied to corn at the rate of half a pint to the hill, they proved an excellent manure of corn. The experiment has been repeated every year since with good effect, not only producing great crops of corn, but manifestly leaving the ground in good order for a succeeding crop, with but very little yard manure, no more than a quarter of what would be regarded as a fair dressing, say from three to four loads to the acre. The land is a light loam, and has been under the plow incessantly for more than twenty years, bearing for the last eight years hoed crops every year, generally corn and potatoes alternately, but some of the time corn two years in succession.—*Country Gentleman.*

FALL CARE AND FEEDING OF SHEEP.—Sheep should never be permitted to grow poor in the fall. Give them the best feed you can, and if consistent with your concerns, put them in the yard at night, if at all cold or stormy, and in the morning give them a little of the best hay you have, or a few oats, and after they have eaten turn them out again. Just remember at this season they need care and attention, and your own good judgment will suggest the manner in which it can be most properly bestowed.—*Germantown Telegraph.*

Ladies' Department.

DOMESTIC RECIPES.

HONEY CAKE, No. 1.—Three-quarters of a pound of butter, three-quarters of a pound of sugar, six eggs, two pounds of flour, one table-spoonful of ground cinnamon, half a gill of cream, one quart of honey, one table spoonful of dissolved salæratus. Beat the butter and sugar to a cream; beat the eggs and stir in with the flour, cinnamon, cream and honey. Beat the whole for ten minutes, then stir in the salæratus. Line your pan with several thicknesses of paper, well buttered; pour in the mixture, and bake it in a slow oven.

HONEY CAKE, No. 2.—Half-a-pound of sugar, half-a-pound of butter, one pint of honey, one table spoonful of cinnamon, one teaspoonful of nutmeg, as much flour as will form a dough. Stir the butter and sugar together, add the nutmeg, cinnamon and honey, and enough flour to form a dough. Knead it well, roll it out in sheets, cut it in cakes with a cake-cutter or the rim of a tumbler, place them on tins, and bake them in a moderately hot oven. Before you set them in the oven, wash them over with a little honey and water mixed in equal quantities.—*National Cook Book.*

ADVERTISING DEPARTMENT.

☞ A limited number of advertisements of an appropriate character will be inserted in the monthly Farmer at the following

RATES.

For one square 15 lines, one insertion.....$1,00
For each subsequent insertion.....50

☞ The above rates will be charged for all advertisements, whether longer or shorter.

Fowls and Eggs.

The subscriber offers for sale during the coming season, Brahma Pootra Fowls and Eggs. Fowls all carefully bred from as pure blooded stock as can be found in the United States. All at the shortest notice, and carefully cooped and sent to any part of the United States, or the Canadas. Price is $2,00 per doz.

Address post paid, C. P. ABBOTT,
April 1, 1854. 7w Montpelier, Vt.

Wanted,

AN APPRENTICE, about 16 years of age, to learn the Carriage-painting and Harness-making business.

Also, for sale, a large lot of Harnesses, covered and open wagons, 1 slide-top Buggy, 1 two-wheeled Chaise, second-hand Carryalls and Wagons, and 1 good Sulkey.

HOLLIS HASTINGS.
Framingham, Mass., March 25, 1854. tf

Suffolk Hogs.

2 FULL Blood Suffolk Boars.
1 ¼ " " "
1 ½ " " "
5 Breeding Sows of from ½ to ¾ Blood.

For sale by C. G. McNEIL.
Andover, Mass., April, 8, 1854. 3t

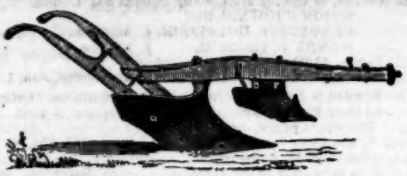
Suffolk Swine.

The subscriber offers for sale, on reasonable terms, several full blood Suffolk Sows, of different ages, two Boars, and a dozen Pigs. Some of these animals are of the best quality for symmetry and beauty, and are the descendants of Swine which were imported from England last spring.

HENRY M. CLARKE,
Linden Place, Waltham.
March 18, 1854 tf

THE BOSTON AND WORCESTER

EAGLE DOUBLE PLOWS.



THE superior merits of these Plows consist in

1. The mode of attaching the forward mould-board to the beam, by which great strength and durability are secured, as also the various desirable changes in debt of work and relative depth of each plow, the same being regulated to any shade of nicety, with perfect facility:

2. The entire and handsome overturning of the sod furrow, by the forward mould-board, to the extent of the whole width of furrow taken by the plow, placing it beneath, out of the way of the teeth of the harrow, cultivator, or other implement, so that it is in no case dragged to the surface in the after cultivation of the crop:

3. The thorough and finished work done by the rear mould-board, in taking up its furrow of under soil and sifting or scattering it over the inverted sod, so as to entirely fill to the surface, and at the same time break open any undue cohesion of the soil, leaving the plowed land in a perfectly pulverized condition, requiring little labor with the harrow or other surface-working instrument,—and indeed, in all tolerably free loams, rendering the use of these instruments, as pulverizers, quite unnecessary:

4. The remarkably light draught of the plow, in proportion to the amount of work and the thoroughness of pulverization accomplished.

Several sizes of the BOSTON AND WORCESTER EAGLE DOUBLE PLOW, are made by the subscribers, from patterns of their own original invention. They invite their friends and customers to examine these Plows, as to quality and durability of material, thoroughness and finish of construction, and to test their working properties.

Manufactory at Worcester, and Warehouse, Quincy Hall, over the Market, Boston.

RUGGLES, NOURSE, MASON & CO.

April 30, 1853.

Super--Phosphate of Lime.

THIS celebrated Fertilizer, where it has been fairly tested the last year, has been found equal, and in many cases superior to the best Peruvian Guano in its immediate effect, and much more permanently beneficial to the land. It is adapted to any soil in which there is a deficiency of *Phosphate*, which is often the case. All crops are benefited by its application. It is composed of ground bone, decomposed by sulphuric acid, to which is added a due proportion of Peruvian Guano, Sulphate of Ammonia, &c.

For sale, with full directions for use, in bags of 150 pounds each. No charge for package. All bags will be branded "C. B. DeBurg, No. 1 Super-Phosphate of Lime."

GEO. DEVENPORT,

Agent for the manufacturer, 5 Commercial, corner of Chatham Street, Boston.

Feb. 18, 1854. tf*

Choice Fowls.

For sale, one or two pair of fowls, of each of the following prolific and beautiful breeds: Gold and Silver Pheasants, Spangled Polands, Bolton Grays, Dutch every day Layers, Black Spanish and Black Bantam; also Java Pea Fowls, and splendid Turkeys of the Great Norfolk or Virginia breed. Also for sale, Eggs for Hatching, from the White Shanghae, and some of the other breeds, which are in seperate enclosures, to ensure the purity of the eggs. For further particulars address

H. H. LITTLE, East Marshfield, Plymouth Co., Mass.

March 11, 1854. 4w*May

Fertilizers.

BEST PERUVIAN GUANO.

Super-Phosphate of Lime.—"DeBurg's No. 1."

Poudrette, of the best quality.

Ground Plaster, suitable for agricultural purposes.

Ground Bone, Bone Dust and Burnt Bone.

Also, Grass Seeds of reliable quality at the lowest market price.

GEO. DAVENPORT,

5 Commercial, corner of Chatham Street, Boston.

Feb. 18, 1854. tf*

Walnut Grove Nursery.

NEWTON CENTRE, MASS.

The subscribers have on hand as usual a large stock of Fruit and other Trees, which they are prepared to sell at very reasonable rates. Among others, Apple, Pear, Cherry, Plum, Peach, Grape Vines, Raspberries, Blackberries, &c. &c.

Also, Ornamental Trees, Shrubs, Roses, Herbaceous Roots, Creepers, &c. &c.

A splendid lot of Sugar Maple, 8 to 10 feet high, $30 per hundred.

6000 Apple stocks, $10 per thousand.

5000 Buckthorn, 2 to 3 years, $15 to $20 per thousand.

Large and fine Norway Spruce; Arbor Vitæ for hedges and standards.

Fine lot Red Dutch Currants, $6 per hundred.

Scions will be furnished, if ordered early.

Other things too numerous to mention. All orders will be promptly attended to, and the trees securely packed, when desired, for which an extra charge will be made. Catalogues sent to post-paid applicants. All packages delivered in Boston free of expense.

JAMES HYDE & SON.

Newton Centre, March 18, 1854. w*tf

Fruit and Ornamental Trees.

The proprietors offer for sale an extensive assortment of fruit and ornamental trees, comprising all the choice standard varieties, for the Garden or Orchard; also Currants, Gooseberries, Grape Vines, &c. 1000 Buckthorn and Arbor Vitæ for Hedges.

S. & G. HYDE.

Newton Corner, March 18, 1854. w*tf

R. M. COPELAND,

Landscape and Ornamental Gardener,

WILL furnish plans of Cemeteries, Public Squares, Pleasure Grounds, Gardens and Farms, with directions for their laying out and improvement, also for the construction of every species of buildings connected with Horticulture or Agriculture, Barns, Green-Houses, Conservatories, Rustic Arbors, &c., whether for use or ornament.

He will furnish lists of the most approved and desirable ornamental and useful Trees, Shrubs, and Flowers; also, plans and estimates for every species of underdraining, and will contract for and superintend the removal of trees of every size under fifty feet, at all seasons of the year.

Refers to—Hon. M. P. WILDER, Dorchester.
" S. H. WALLEY, Roxbury.
" SAMUEL WALKER, Roxbury.
" J. W. EDMANDS, Newton Centre.
Prof. H. W. LONGFELLOW, Cambridge.
J. W. PROCTOR, Danvers.
SIMON BROWN, Ed. of N. E. Farmer.

R. M. C. may be addressed Box 326 Boston Post Office, and No. 3 Dudley Block, Roxbury.

March 25, 1854. eow5t*2

The People's Patent Office.

THIS well known establishment is still carried on under the personal superintendence of its founder, ALFRED E. BEACH, by whom all the necessary drawings, specifications, and documents, for Patents, Caveats, &c., are prepared with the utmost fidelity and dispatch.

Persons wishing for information or advice relative to Patents or Inventions, may at all times consult the undersigned *without charge*, either personally at his office, or by letter. To those living at a distance, he would state, that all the needful steps necessary to secure a Patent, can be arranged by letter, just as well as if the party were present, and the expense of a journey be thus saved. All consultations strictly private and confidential. When parties wish to be informed as to the probability of being enabled to obtain Patents, it will be necessary for them to forward by mail a rough outline sketch and description of the invention. No fee or charge is made for such examinations.

The *first step*, always, in securing a Patent in this country, is to prepare *a model*, from which the necessary drawings are made. If the undersigned is engaged to prosecute the application and prepare the various papers, the model must first be sent to the PEOPLE'S PATENT OFFICE, 86 Nassau st., New York, after which, it will be forwarded to Washington.

Models from a distance may be sent by express or otherwise.

For further information apply to or address, post paid,

ALFRED E. BEACH,
Solicitor of American and Foreign Patents,
People's Patent Office, 86 Nassau Street, New York.

Feb. 18, 1854. 1w*May

Bound Volumes.

BACK VOLUMES of the NEW ENGLAND FARMER, elegantly bound in Muslin, Gilt and Embossed, are now for sale at this office.

CONTENTS OF THIS NUMBER.

Calendar for May.....Page 201
Rancid Butter.....203
Legislative Agricultural Meetings—Preparing Seed Corn....204
Profit in Raising Corn—Concord Farmer's Club.....205
On Renovating Soils.....206
Classification of Manures—Bugology vs. Squashology.....207
What a Garden Should Be.....208
Sowing Clover Seed—Plums—The Curculio—.....210
Larvæ of the Crane Fly—How to Make the Butter Come....210
Farming in New England—No. 4.....211
Review of the Past and the Present Condition of Agriculture..212
The Crow—Winter Worms.....213
Tenth Agricultural Meeting,—.....214
The "Witch Hazel.".....215
Save the Bones—Middlesex County Society.....216
Guano and Super-Phosphate.....218
Horn Shavings—Plowman's Song—Early June Beet.....219
Successful Butter-Making—Onions and Carrots.....220
Facts in Human Life.....220
Eleventh Agricultural Meeting.....221
Prepare your Ground for the Mower—Barn Stables.....223
Twelfth Agricultural Meeting.....226
State Farm at Westborough.....227
Composting Lime and Ashes with Muck.....228
Monthly Farmer for March.....230
Potato Rot.....231
Use of Guano.....232
Effects of Innoculation.....233
New Books—To Destroy the Curculio.....234
Natural Beauty of Ornamental Trees.....237
American Pomological Society—Roots of Plants—Transplanting..238
Warts on Plum Trees.....239
Potash as a Fertiliser.....240
Country Farmers and City Mechanics—No. 2.....241
The Profit of Fattening Swine—Plant the Fruit Trees.....242
Illionis Farm Implements.....243
Extracts and Replies.....244
Cattle of New England—Norfolk Agricultural Society.....245
Will Ashes Desolve Bones.....246
Ladies Department.....246

ILLUSTRATIONS.

Village Homestead as it should be—Improved.....200
Ketchum's Mowing Machine.....225
Sewing Machine.....235
The Horse Hoe.....240
Improved Hinge Harrow.....245

To Farmers.

THE subscriber is now prepared to receive orders for the Improved Poudrette. It has been manufactured under the advice of some of the best agricultural chemists in the Country, and is now commended to the public as the most certain and cheap Fertiliser that can be obtained, acting favorably on all crops, and on all soils. Six different articles are used in its composition, which combined make it a perfect manure for every crop raised in New England. It is finely adapted to corn, and the present and prospective high prices of this indispensable crop, ought to induce all farmers to increase the quantity planted, which they can do profitably by using the Improved Poudrette.

Prof. Mapes says of it, "no farmer using it once, will be willing ever to dispense with it." I raised corn with it the past season at a cost of less than 40 cts. ℔ bushel. Price in Providence $1,50 ℔ bbl., cash. It can be obtained of Messrs. PARKER & WHITE, 59 & 63 Blackstone Street, Boston.

T. B. HALLIDAY,
13 West Water Street, Providence, R. I.

Feb. 25, 1854. 3mo*

Cranberry Plants.

BELL, or Egg shaped Variety—commonly raised in New England, and no doubt is the best variety for cultivation—they are hardy and prolific—sometimes produce over 250 bushels ℔ acre, after 2 years, and needs but little cultivation. Circulars relating to culture and price will be forwarded to applicants.

F. TROWBRIDGE,
New Haven, Conn

Feb. 18, 1854. tf*

Fruit and Ornamental Trees,

HEDGE PLANTS, SHRUBS, &c.

WILLIAM HALL, Bradford, Mass., offers for sale his usual assortment of Apple, Pear, Plum, Peach, Cherry, Apricot, Quince, Current and Gooseberry Trees. Ornamental trees of large size.

A fine collection of Roses including the New White and Yellow Climbers. A fine stock of Buckthorn, Privett, Arbor Vitæ and Norway Spruce, plants for Hedges.

Orders promptly attended to.

April 9, 1853. tf.

NEW ENGLAND FARMER

Is published on the first of every month, by JOHN RAYNOLDS and JOEL NOURSE, at Quincy Hall, South Market St., Boston.

SIMON BROWN, Editor.
FREDERICK HOLBROOK, } Associate
HENRY F. FRENCH, } Editors.

☞ Terms, $1,00 per annum in advance.

☞ All subscriptions to commence with the volume, Jan. 1.

The FARMER is devoted *exclusively* to Agriculture, Horticulture, and their kindred Arts and Sciences; making a neat volume of 576 octavo pages, embellished with numerous engravings. It may be elegantly bound in muslin, embossed and gilt, at 25 cts. a volume, if left at the office of publication.

☞ Also published at the same office every Saturday, on a large handsome folio sheet, the

NEW ENGLAND FARMER, (WEEKLY,)

An Independent Agricultural Family Newspaper.

The News and Miscellaneous departments, under the charge of WILLIAM SIMONDS, will include a full and careful report of the news of the Markets, and the news of the week, such as Domestic, Foreign and Marine Intelligence, Congressional and Legislative proceedings, Temperance and Religious Intelligence, and a general variety of Literary and Miscellaneous matter, adapted to family reading, comprising more useful and valuable reading matter than any other Agricultural Newspaper published in New England. Everything of a hurtful or even doubtful tendency will be carefully excluded from its columns.

☞ Terms $2,00 per annum in advance.

The monthly contains nearly the same matter as the Agricultural department of the weekly.

☞ Postmasters and others, who will forward four new subscribers on the above named terms, for either publication, shall receive a fifth copy gratis for one year.

☞ All orders and letters should be addressed, *post-paid.*

RAYNOLDS & NOURSE,
QUINCY HALL, SOUTH MARKET STREET, BOSTON.

☞ POSTAGE.—The postage on the New England Farmer, monthly, is 1¼ cents per quarter, or 6 cents per year, to any part of the United States, to be paid in advance at the office where the same is received.

One Dollar a Year! 50 Cents a Volume.

SPLENDID ENGRAVINGS!

The People's Journal,

AN ILLUSTRATED RECORD OF AGRICULTURE, MECHANICS, SCIENCE, AND USEFUL KNOWLEDGE.

EVERY Number contains 32 Large Pages of Letter-Press, Beautifully Printed on Fine Paper, and PROFUSELY ILUSTRATED with ENGRAVINGS, forming at the end of each year, TWO SPLENDID VOLUMES, comprising Four Hundred Pages, and Illustrated with about FIVE HUNDRED ELEGANT ENGRAVINGS,

The entire cost being only ONE DOLLAR.

The People's Journal was commenced in November, 1853, and has already attained a large circulation. The November Number contained 40 engravings, the December Number 72 engravings, the January Number 47 engravings, and the February issue has 61 engravings, making in all 220 illustrations, although only four numbers have been published. These relate to Science, Art, Mechanics, Agriculture, and Useful Knowledge, in accordance with the general plan of the work. No publication of the kind has ever been produced with such magnificence or at so cheap a price. It is admired and taken by every one who sees it.

TERMS.—To Subscribers—One Dollar a Year, or Fifty Cents for Six Months. Subscriptions may be sent by mail in coin, post office stamps, or bills, at the risk of the publisher. The name of the Post Office, County and State, where the paper is desired to be sent, should be plainly written. Address, postage paid,

ALFRED E. BEACH,
No. 86 Nassau Street, New York City,
Editor of the People's Journal.

A LIBERAL DISCOUNT TO POST MASTERS AND AGENTS.

Single copies 12½ cents. Specimens sent on receipt of four postage stamps.

Feb. 4, 1854. 4w4*

Suffolk and Middlesex Pigs.

I have now a prime stock of imported or full bred Suffolk and Middlesex Swine, for sale.

☞ Having just bought the entire stock of G. W. Wilson Esq., of MALDEN, including his fine old Boar and Breeding Sows, I can fill orders with superior samples—old or young. The stock can be seen at my residence, Boardman St., Melrose, Mass. Address

GEO. P. BURNHAM,
Box 22, Post Office, Boston.

Feb. 4, 1854. 4tw3tm℔.